

# DSU/CSU MIB DS1/E1 MIB II

## Enterprise-specific

## MIB Reference

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DataSMART® MAX™ T1/FT1

DataSMART MAX E1/FE1

DataSMART SPort™ T1/FT1

M-PATH™ T1 CSU

DataSMART 600 Series  
T1/FT1 DSU/CSUs

DataSMART 500 Series  
T1/FT1 DSU/CSUs

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# Preface

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## **Who should read this manual?**

This manual is intended as the reference source for the SNMP traps and SNMP MIBs supported by the Kentrox DSUs and CSUs listed on the manual title page. MIB objects specific to either T1 or E1 are identified in the MIB tables. Frame Relay-specific objects are available only in Frame Monitoring DSUs. Objects specific to the terminal interfaces are available only in add/drop units.

## **Viewing this manual as a PDF file**

This manual is designed to be used as both a printed book and a PDF file, and includes the following features for PDF viewing:

- Cross-references are clickable hyperlinks that appear in blue text.
- Chapters and section headings are represented as clickable bookmarks in the left-hand pane of the Acrobat viewer.
- Page numbering is consistent between the printed page and the PDF file to help you easily select a range of pages for printing.

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The numbers listed below are current at the time of publication. See the Kentrox Web site for detailed contact and warranty information.

1-800-733-5511 (continental USA only)  
1-503-350-6001  
email: [support@kentrox.com](mailto:support@kentrox.com)  
<http://www.kentrox.com>



# 1

## *SNMP Traps*

---

The Simple Network Management Protocol (SNMP) defines an asynchronous message called a trap. Traps are sent by an SNMP agent to an SNMP manager. Typically SNMP traps report error conditions, but any sort of message can be sent. Kentrox Data Service Units (DSUs) or Channel Service Units (CSUs) with SNMP capabilities use traps to report error conditions and information events (e.g., “error conditions on the NI interface have cleared”).

The SNMP specifications define a number of standard trap types, of which the SNMP-capable Kentrox units implement the following: *coldStart*, *warmStart*, *linkDown*, and *linkUp*.

To allow for more descriptive traps, SNMP agents can send enterprise-specific traps. These are traps that apply to a specific product. DataSMART 500 and 600 series DSUs and M-PATH CSUs implement several enterprise-specific traps, although DataSMART MAX and SPort DSUs do not. The list of supported traps varies with the product.

SNMP is implemented using UDP, an “unreliable” transport protocol. UDP uses a send-and-forget mechanism. There is no way for the DSU or CSU to guarantee that a trap has reached its destination. The likelihood of any particular packet reaching its destination when UDP is used depends on current network conditions.

This does not mean that every other trap from the DSU or CSU will be lost. This is simply a precautionary warning. This situation is not unique to the Kentrox DSUs and CSUs, either. Any device using UDP for the SNMP transport protocol (which is what the specification says to do) will have this concern.

---

## Configuration for SNMP traps

The DSU or CSU must have the following configuration in order to use SNMP traps:

- A connection to an IP network. Your unit can provide one or more of these IP network interfaces:
  - SLIP on the control port
  - PPP on the control port
  - Ethernet on the PCMCIA adapter or directly on the unit
  - In-band (on frame monitoring DSUs)
  - Data link (FDL or DS0)
- If source addresses and/or IP address screening is being used, then the SNMP manager(s) must be allowed access.
- The SNMP manager(s) IP addresses must be entered in the trap host list (a total of ten addresses can be entered).
- The SNMP agent must be enabled.

Refer to your product user's guide for details on setting up the unit for operation within an IP network.

---

## SNMP traps supported by all SNMP-capable units

All SNMP-capable Kentrox DSUs and CSUs implement the *coldStart*, *warmStart*, *linkDown*, and *linkUp* traps.

The table below shows the conditions under which these standard traps are generated.

**Table 1—SNMP traps supported by all SNMP-capable units**

Trap	Conditions that generate the trap	MIB objects
coldStart	The unit has been power-cycled. <i>coldStart</i> traps are not generated until ten seconds after the unit is power-cycled to allow the hardware providing the low-level IP network interface time to start up and stabilize before attempting to send a packet.	<i>ifDescr</i> and <i>ifIndex</i> of all the interfaces on the unit.
warmStart	A <i>warmStart</i> trap is generated every time you enter <b>ESNMP</b> (enable SNMP) from the command-line and the agent was previously disabled.	<i>ifDescr</i> and <i>ifIndex</i> of all the interfaces on the unit.
linkDown (network or terminal interface)	A network or terminal interface <i>linkDown</i> trap is generated when <i>ifOperStatus</i> (MIB II) changes to <i>down</i> .	<i>ifIndex</i> <i>ifDescr</i> <i>dsx1LineStatus</i> <i>dsx1CurrentESs</i> <i>dsx1CurrentUAs</i>
linkDown (data port interface)	A data port <i>linkDown</i> trap is generated when <i>ifOperStatus</i> (MIB II) changes to <i>down</i> .	<i>ifIndex</i> <i>ifDescr</i>
linkUp (network or terminal interface)	A network or terminal interface <i>linkUp</i> trap is generated when <i>ifOperStatus</i> (MIB II) changes to <i>up</i> .	<i>ifIndex</i> <i>ifDescr</i> <i>dsx1LineStatus</i> <i>dsx1CurrentESs</i> <i>dsx1CurrentUAs</i>
linkUp (data port interface)	A data port <i>linkUp</i> trap is generated when <i>ifOperStatus</i> (MIB II) changes to <i>up</i> .	<i>ifIndex</i> <i>ifDescr</i>

---

## Enterprise-specific traps

The SNMP specification allows for the creation of new traps, called enterprise-specific traps. DataSMART 500 and 600 series DSUs and M-PATH CSUs define several enterprise-specific traps in order to more accurately describe the network and system conditions.

---

The following table shows the conditions under which the enterprise-specific traps will be generated.

### System-wide events and conditions

Trap	Enterprise number	Conditions	MIB objects
<b>dsAcSetNiExcessErrorRate</b>	5001	Set NI Excessive Error Rate (NEER).	ifIndex, ifDescr, dsx1LineStatus, dsx1CurrentESs, dsx1CurrentUASs
<b>dsAcClearNiExcessErrorRate</b>	5002	Clear NI Excessive Error Rate.	ifIndex, ifDescr, dsx1LineStatus, dsx1CurrentESs, dsx1CurrentUASs
<b>dsAcSetTiExcessErrorRate</b>	5003	Set TI Excessive Error Rate (TEER).	ifIndex, ifDescr, dsx1LineStatus, dsx1CurrentESs, dsx1CurrentUASs
<b>dsAcClearTiExcessErrorRate</b>	5004	Clear TI Excessive Error Rate.	ifIndex, ifDescr, dsx1LineStatus, dsx1CurrentESs, dsx1CurrentUASs
<b>dsAcOnPowerTransition</b>	5005	A/B on power transition on DataSMART 558 and MPATH 538.	dsSsPowerStatus
<b>dsAcOffPowerTransition</b>	5006	A/B Off power transition on DataSMART 558 and MPATH 538.	dsSsPowerStatus
<b>dsFmcSetNiRcvUpperBwThresh</b>	9001	The total frame traffic through the unit has exceeded the configured threshold for NI Receive. Applies to frame monitoring DSUs only.	dsRpFrCur15MVC

<b>Trap</b>	<b>Enterprise number</b>	<b>Conditions</b>	<b>MIB objects</b>
<b><i>dsFmcClrNiRcvUpperBwThresh</i></b>	9002	The total traffic through the unit has crossed back under 20 percent below the configured threshold after exceeding the threshold for NI Receive. Applies to frame monitoring DSUs only.	dsRpFrCur15MVC
<b><i>dsFmcSetNiXmtUpperBwThresh</i></b>	9003	The total traffic through the unit has exceeded the configured threshold for NI Transmit. Applies to frame monitoring DSUs only.	dsRpFrCur15MVC
<b><i>dsFmcClrNiXmtUpperBwThresh</i></b>	9004	The total traffic through the unit has crossed back under 20 percent below the configured threshold after exceeding the threshold for NI Transmit. Applies to frame monitoring DSUs only.	dsRpFrCur15MVC
<b><i>dsFmcFpingLinkDown</i></b>	9005	A VC has transitioned to a link down since FPINGs are not being returned. Applies to frame monitoring DSUs only.	dsRpFrCur15MVC
<b><i>dsFmcFpingLinkUp</i></b>	9006	A VC has transitioned to a link up since an FPING was just returned. Applies to frame monitoring DSUs only.	dsRpFrCur15MVC



# 2

## *SNMP MIBs*

---

SNMP uses a database-like construct called the Management Information Base (MIB). The MIB defines all the objects in the SNMP universe. If an object is not in the MIB, an SNMP entity does not know about it. Technically, there is only one MIB, which is a tree structure of information. It is customary, however, to refer to the branches of the tree as MIBs themselves. For example, the DS1 branch of the MIB tree is referred to as the DS1 MIB.

Standard MIBs are developed by Internet committees and published as Internet Requests For Comments (RFCs). Enterprise-specific MIBs are developed by individual groups, usually corporations. Enterprise-specific MIBs are usually developed to give better control over a specific product.

Table 2— below summarizes the MIBs supported by SNMP-capable Kentrox DSUs and CSUs.

**Table 2—MIBs supported by SNMP-capable DSUs and CSUs**

MIB name	RFC number	Description
MIB II	1213	The MIB required by all TCP/IP hosts contains TCP/IP information about the host.
DS1	1406	The DS1/E1 MIB contains information about the DataSMART or M-PATH T1 modules.
Frame Relay DTE MIB (part)	1315	A subset of this MIB's circuit table is available on frame monitoring DSUs only.
Enterprise-specific	n/a	The enterprise-specific MIB allows complete remote monitoring and control of the DataSMART or M-PATH unit.

### **Accessing MIBs**

The easiest way to get the MIBs is to download them from the Kentrox web site as listed under “MIB source files” on page 9.

If you cannot download the MIBs from the web site, contact Kentrox and we will arrange an alternate way to deliver the MIBs to you.

---

## Configuration for using SNMP MIBs

### Setup required to use SNMP MIBs

The DSU or CSU must have the following configuration in order to use SNMP MIBs:

- A connection to an IP network. Your unit can provide one or more of these IP network interfaces:
  - SLIP on the control port
  - PPP on the control port
  - Ethernet on the PCMCIA adapter or directly on the unit
  - In-band (on Frame monitoring DSUs)
  - Data link (FDL or DS0)
- If source addresses and/or IP address screening is being used, then the SNMP manager(s) must be allowed access.
- The SNMP agent must be enabled.

Refer to your product user's guide for detailed instructions on how to set up the unit for operation in an IP network.

### SNMP management application setup

Any SNMP management application, such as HP OpenView or SunNet Manager, should be able to send SNMP sets and gets to the DSU or CSU.

#### Load the MIBs

Without the MIBs loaded into the SNMP manager, you will have to work with the raw Object Identifiers (OIDs). These are long strings of numbers that uniquely address a MIB object. It is recommended that you load the MIBs instead of working with raw OIDs.

Your SNMP manager will have some mechanism for adding the MIBs. The standard MIBs may already be loaded, but you will need to add the unit's Kentrox enterprise-specific MIB. The process of adding a new MIB may be referred to as "loading" or "compiling."

#### SNMP community strings

Make sure that the SNMP read and write community strings are the same on the DSU/CSU and the SNMP manager.

# 3

# *DataSMART 500/600 Series & M-PATH enterprise MIB*

---

The enterprise-specific MIB for the DataSMART 500 and 600 series DSU and M-PATH CSU allows an SNMP manager as much control over these units as an operator using the unit's user interface. This chapter includes the following sections:

- Enterprise-specific MIB road map for the DataSMART 500 and 600 series DSU and M-PATH CSU
- A complete listing of the enterprise-specific MIB for the DataSMART 500 and 600 series DSU and M-PATH CSU

---

# The 500/600/M-PATH enterprise-specific MIB road map

*SNMP MIBs are not always the easiest documents to navigate. The enterprise-specific MIB for DataSMART 500/600 and M-PATH can be a little difficult just because of its size. This road map should enable you to more quickly find what you are looking for.*

---

## MIB root down to **datasmart**

```
iso(1)
  org(3)
    dod(6)
      internet(1)
        private(4)
          enterprises(1)
            adcKentrox(181)
              ktxMibs(2)
                datasmart(2)
```

## The system status group

See [page 29](#)

```
datasmart(2)
  dsSs(1)
    dsSsAlarmSource(1)
    dsSsAlarmState(2)
    dsSsLoopback(3)
    dsSsPowerStatus(4)
```

## The user reports group

See [page 31](#)

```
dsRp(2)
  dsRpUsr(1)
    The user time counts table
```

```
  dsRpUsrTmCntTable(1)
    dsRpUsrTmCntEntry(1)
      dsRpUsrTmCntIndex(1)
      dsRpUsrTmCntSecs(2)
      dsRpUsrTmCnt15Mins(3)
      dsRpUsrTmCntDays(4)
```

The user current table

```
  dsRpUsrCurTable(2)
    dsRpUsrCurEntry(1)
      dsRpUsrCurIndex(1)
      dsRpUsrCurEE(2)
      dsRpUsrCurES(3)
      dsRpUsrCurBES(4)
      dsRpUsrCurSES(5)
      dsRpUsrCurUAS(6)
      dsRpUsrCurCSS(7)
      dsRpUsrCurDM(8)
      dsRpUsrCurStatus(9)
```

### **The user interval table**

```
dsRpUsrIntvlTable(3)
  dsRpUsrIntvlEntry(1)
    dsRpUsrIntvlIndex(1)
    dsRpUsrIntvlNum(2)
    dsRpUsrIntvlEE(3)
    dsRpUsrIntvlES(4)
    dsRpUsrIntvlBES(5)
    dsRpUsrIntvlSES(6)
    dsRpUsrIntvlUAS(7)
    dsRpUsrIntvlCSS(8)
    dsRpUsrIntvlDM(9)
    dsRpUsrIntvlStatus(10)
```

### **The user total table**

```
dsRpUsrTotalTable(4)
  dsRpUsrTotalEntry(1)
    dsRpUsrTotalIndex(1)
    dsRpUsrTotalEE(2)
    dsRpUsrTotalES(3)
    dsRpUsrTotalBES(4)
    dsRpUsrTotalSES(5)
    dsRpUsrTotalUAS(6)
    dsRpUsrTotalCSS(7)
    dsRpUsrTotalDM(8)
    dsRpUsrTotalStatus(9)
```

### **The user day table**

```
dsRpUsrDayTable(5)
  dsRpUsrDayEntry(1)
    dsRpUsrDayIndex(1)
    dsRpUsrDayNum(2)
    dsRpUsrDayEE(3)
    dsRpUsrDayES(4)
    dsRpUsrDayBES(5)
    dsRpUsrDaySES(6)
    dsRpUsrDayUAS(7)
    dsRpUsrDayCSS(8)
    dsRpUsrDayDM(9)
    dsRpUsrDayStatus(10)
```

## **The carrier reports**

### **group**

See [page 40](#)

### **dsRpCar(2)**

```
  dsRpCarCntSecs(1)
  dsRpCarCnt15Mins(2)
```

### **The carrier current table**

```
dsRpCarCur(3)
  dsRpCarCurEE(1)
  dsRpCarCurES(2)
  dsRpCarCurBES(3)
  dsRpCarCurSES(4)
```

dsRpCarCurUAS(5)  
dsRpCarCurCSS(6)  
dsRpCarCurLOFC(7)

#### The carrier interval table

**dsRpCarIntvlTable(4)**

**dsRpCarIntvlEntry(1)**  
dsRpCarIntvlNum(1)  
dsRpCarIntvlEE(2)  
dsRpCarIntvlES(3)  
dsRpCarIntvlBES(4)  
dsRpCarIntvlSES(5)  
dsRpCarIntvlUAS(6)  
dsRpCarIntvlCSS(7)  
dsRpCarIntvlLOFC(8)

#### The carrier total table

**dsRpCarTotal(5)**

dsRpCarTotalEE(1)  
dsRpCarTotalES(2)  
dsRpCarTotalBES(3)  
dsRpCarTotalSES(4)  
dsRpCarTotalUAS(5)  
dsRpCarTotalCSS(6)  
dsRpCarTotalLOFC(7)

### The statistics reports group

See [page 44](#)

#### dsRpStat(3) The statistics report table

**dsRpStTable(1)**

**dsRpStEntry(1)**  
dsRpStIndex(1)  
dsRpStEsfErrors(2)  
dsRpStCrcErrors(3)  
dsRpStOofErrors(4)  
dsRpStFrameBitErrors(5)  
dsRpStBPVs(6)  
dsRpStControlledSlips(7)  
dsRpStYellowEvents(8)  
dsRpStAISEvents(9)  
dsRpStLOFEvents(10)  
dsRpStLOSEvents(11)  
dsRpStFarEndBlkErrors(12)  
dsRpStRemFrameAlmEvts(13)  
dsRpStRemMFrameAlmEvts(14)  
dsRpStLOTS16MFrameEvts(15)  
dsRpStZeroCounters(16)

### Pagination settings

(for the user interface)

See [page 46](#)

**dsRpPI(4)**

dsPlBreak(1)  
dsPlLen(2)

## **The alarm history report table**

See [page 47](#)

**dsRpAhrTable(5)**  
**dsRpAhrEntry(1)**  
  dsRpAhrIndex(1)  
  dsRpAhrStr(2)

## **The security history report table**

See [page 48](#)

**dsRpShrTable(6)**  
**dsRpShrEntry(1)**  
  dsRpShrIndex(1)  
  dsRpShrDateTime(2)  
  dsRpShrEventType(3)  
  dsRpShrComments(4)

## **Error thresholds**

See [page 49](#)

dsRpBes(7)  
dsRpSes(8)  
dsRpDm(9)

## **The Frame-Relay reports group**

See [page 50](#)

### **dsRpFr(10)** **The Frame-Relay time counts table**

**dsRpFrTmCntTable(1)**  
**dsRpFrTmCntEntry(1)**  
  dsRpFrTmCntDir(1)  
  dsRpFrTmCntSecs(2)  
  dsRpFrTmCnt2Hrs(3)  
  dsRpFrTmCntDays(4)

### **The Frame-Relay previous 15-minute table**

**dsRpFrPre15MTable(2)**  
**dsRpFrPre15MEntry(1)**  
  dsRpFrPre15MDir(1)  
  dsRpFrPre15MVcIndex(2)  
  dsRpFrPre15MVc(3)  
  dsRpFrPre15MFrames(4)  
  dsRpFrPre15MOctets(5)  
  dsRpFrPre15MKbps(6)  
  dsRpFrPre15MFpMax(7)  
  dsRpFrPre15MFpAvg(8)  
  dsRpFrPre15MFpLost(9)  
  dsRpFrPre15MFpSent(10)  
  dsRpFrPre15MStatus(11)

### **The Frame-Relay current 15-minute table**

**dsRpFrCur15MTable(3)**  
**dsRpFrCur15MEntry(1)**  
  dsRpFrCur15MDir(1)  
  dsRpFrCur15MVcIndex(2)  
  dsRpFrCur15MVc(3)  
  dsRpFrCur15MFrames(4)  
  dsRpFrCur15MOctets(5)  
  dsRpFrCur15MKbps(6)  
  dsRpFrCur15MFpMax(7)

dsRpFrCur15MFpAvg(8)  
dsRpFrCur15MFpLost(9)  
dsRpFrCur15MFpSent(10)  
dsRpFrCur15MFpRmtIp(11)  
dsRpFrCur15MFpRmtVc(12)  
dsRpFrCur15MStatus(13)

#### The Frame-Relay two hour current table

**dsRpFrCur2HTable(4)**

**dsRpFrCur2HEntry(1)**

dsRpFrCur2HDir(1)  
dsRpFrCur2HVcIndex(2)  
dsRpFrCur2HVc(3)  
dsRpFrCur2HFrames(4)  
dsRpFrCur2HOctets(5)  
dsRpFrCur2HKbps(6)  
dsRpFrCur2HFpMax(7)  
dsRpFrCur2HFpAvg(8)  
dsRpFrCur2HFpLost(9)  
dsRpFrCur2HFpSent(10)  
dsRpFrCur2HStatus(11)

#### The Frame-Relay two hour interval table

**dsRpFrIntvl2HTable(5)**

**dsRpFrIntvl2HEntry(1)**

dsRpFrIntvl2HDir(1)  
dsRpFrIntvl2HVcIndex(2)  
dsRpFrIntvl2HNum(3)  
dsRpFrIntvl2HVc(4)  
dsRpFrIntvl2HFrames(5)  
dsRpFrIntvl2HOctets(6)  
dsRpFrIntvl2HKbps(7)  
dsRpFrIntvl2HFpMax(8)  
dsRpFrIntvl2HFpAvg(9)  
dsRpFrIntvl2HFpLost(10)  
dsRpFrIntvl2HFpSent(11)  
dsRpFrIntvl2HStatus(12)

#### The Frame-Relay total table

**dsRpFrTotalTable(6)**

**dsRpFrTotalEntry(1)**

dsRpFrTotalDir(1)  
dsRpFrTotalVcIndex(2)  
dsRpFrTotalVc(3)  
dsRpFrTotalFrames(4)  
dsRpFrTotalOctets(5)  
dsRpFrTotalKbps(6)  
dsRpFrTotalFpMax(7)  
dsRpFrTotalFpAvg(8)  
dsRpFrTotalFpLost(9)  
dsRpFrTotalFpSent(10)  
dsRpFrTotalStatus(11)

### The Frame-Relay day table

**dsRpFrDayTable(7)**

**dsRpFrDayEntry(1)**

- dsRpFrDayDir(1)
- dsRpFrDayVcIndex(2)
- dsRpFrDayNum(3)
- dsRpFrDayVc(4)
- dsRpFrDayFrames(5)
- dsRpFrDayOctets(6)
- dsRpFrDayKbps(7)
- dsRpFrDayFpMax(8)
- dsRpFrDayFpAvg(9)
- dsRpFrDayFpLost(10)
- dsRpFrDayFpSent(11)
- dsRpFrDayStatus(12)

### The Frame-Relay utilization report table

**dsRpFrUrTable(8)**

**dsRpFrUrEntry(1)**

- dsRpFrUrDir(1)
- dsRpFrUrVcIndex(2)
- dsRpFrUrVc(3)
- dsRpFrUrCIRExceeded(4)
- dsRpFrUrCIRExceededOctets(5)
- dsRpFrUrEIRExceeded(6)
- dsRpFrUrEIRExceededOctets(7)

### The local maintenance group

See [page 64](#)

**dsLm(3)**

- dsLmLoopback(1)
- dsLmSelfTestState(2)
- dsLmSelfTestResults(3)

### The remote maintenance group

See [page 65](#)

**dsRm(4)**

- dsRmLbkCode(1)
- dsRmTestCode(2)
- dsRmBertState(3)
- dsRmBertCode(4)
- dsRmBertTestSecs(5)
- dsRmBertBitErrors(6)
- dsRmBertErrdSecs(7)
- dsRmBertTotalErrors(8)
- dsRmBertReSync(9)

### The Frame-Relay ping group

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**dsRmFping(10)**

- dsRmFpingAction(1)
- dsRmFpingState(2)
- dsRmFpingVc(3)
- dsRmFpingFreq(4)
- dsRmFpingLen(5)
- dsRmFpingCur(6)
- dsRmFpingMin(7)

dsRmFpingMax(8)  
dsRmFpingAvg(9)  
dsRmFpingLost(10)  
dsRmFpingTotal(11)  
dsRmFpingRmtVc(12)  
dsRmFpingRmtIp(13)

## The alarm configuration group

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### dsAc(5)

dsAcAlmMsg(1)  
dsAcYelAlm(2)  
dsAcDeact(3)  
dsAcEst(4)  
dsAcUst(5)  
dsAcSt(6)  
dsAcBerAlm(7)  
dsAcRfaAlm(8)  
dsAcAisAlm(9)

## The control port configuration group

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### dsCc(6)

dsCcEcho(1)  
dsCcControlPort(2)  
dsCcBaud(3)  
dsCcParity(4)  
dsCcDataBits(5)  
dsCcStopBits(6)  
dsCcDceIn(7)  
dsCcDteIn(8)

## The data port configuration group

See [page 73](#)

### dsDc(7)

#### The data port configuration table

##### dsDcTable(1)

dsDcEntry(1)  
dsDcIndex(1)  
dsDcDataInvert(2)  
dsDcInterface(3)  
dsDcClockSource(4)  
dsDcXmtClkInvert(5)  
dsDcRcvClkInvert(6)  
dsDcIdleChar(7)  
dsDcLOSInput(8)

## The fractional T1 configuration group

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### dsFc(8)

dsFcLoadXcute(1)

#### The fractional T1 configuration table

##### dsFcTable(2)

dsFcEntry(1)  
dsFcTableIndex(1)  
dsFcChanIndex(2)  
dsFcChanMap(3)

### **dsFcMap16(3)**

**The frame management configuration group**  
 See page 78

**dsFmc(9)**  
 dsFmcFrameType(1)  
 dsFmcAddrOctets(2)  
 dsFmcFcsBits(3)  
 dsFmcUpperBW(4)  
 dsFmcFpingOper(5)  
 dsFmcFpingGen(6)  
 dsFmcFpingThres(7)  
 dsFmcFpingRst(8)  
 dsFmcAddVc(9)  
 dsFmcDelVc(10)

**The management configuration group**  
 See page 80

**dsMc(10)**  
 dsMcNetif(1)  
 dsMcT1DLPPath(2)  
 dsMcDefRoute(3)  
 dsMcCIpAddr(4)  
 dsMcDIpAddr(5)  
 dsMcCDIpMask(6)  
 dsMcEIpAddr(7)  
 dsMcEIpMask(8)  
 dsMcIIpAddr(9)  
 dsMcIIpMask(10)

**The advanced management configuration group**  
 See page 83

**dsAmc(11)**  
 dsAmcAgent(1)  
 dsAmcSourceScreen(2)

#### **The SNMP trap table**

##### **dsAmcTrapTable(3)**

**dsAmcTrapEntry(1)**  
 dsAmcTrapType(1)  
 dsAmcTrapStatus(2)

#### **The source address screening table**

##### **dsAmcScrnTable(4)**

**dsAmcScrnEntry(1)**  
 dsAmcScrnIndex(1)  
 dsAmcScrnIpAddr(2)  
 dsAmcScrnIpMask(3)

#### **The SNMP trap destination table**

##### **dsAmcTrapDestTable(5)**

**dsAmcTrapDestEntry(1)**  
 dsAmcTrapDestIndex(1)  
 dsAmcTrapDestIpAddr(2)  
 dsAmcTrapDestVc(3)  
 dsAmcTrapDestPort(4)

**The network  
interface  
configuration group**

See [page 87](#)

**dsNc(11)**  
dsNcFraming(1)  
dsNcCoding(2)  
dsNcT1403(3)  
dsNcYellow(4)  
dsNcAddr54(5)  
dsNc54016(6)  
dsNcLbo(7)  
dsNcMF16(8)  
dsNcCRC(9)  
dsNcFasAlign(10)  
dsNcE1DLPPath(11)  
dsNcKA(12)  
dsNcGenRfa(13)  
dsNcPassTiRfa(14)  
dsNcIdle(15)

**The system  
configuration group**

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**dsSc(12)**  
dsScMonth(1)  
dsScDay(2)  
dsScYear(3)  
dsScHour(4)  
dsScMinutes(5)  
dsScName(6)  
dsScSlotAddr(7)  
dsScShelfAddr(8)  
dsScGroupAddr(9)  
dsScFrontPanel(10)  
dsScDSCompatible(11)  
dsScClockSource(12)  
dsScAutologout(13)  
dsScZeroPerData(14)  
dsScWvv(15)  
dsScAutoCfg(16)  
dsScTftpSwdl(17)  
dsScBoot(18)

**The terminal  
interface  
configuration group**

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**dsTc(13)**  
dsTcFraming(1)  
dsTcCoding(2)  
dsTcIdle(3)  
dsTcEqual(4)  
dsTcMF16(5)  
dsTcCRC(6)  
dsTcFasAlign(7)  
dsTcAis(8)  
dsTcGenRfa(9)  
dsTcPassTiRfa(10)

# The system status group

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.1.1.0		
<b>dsSsAlarmSource</b> read-only	INTEGER <i>ssSourceNone(1), ssSourceNi(2), ssSourceTi(3), ssSourceDp1(4), ssSourceDp2(5), ssSourceSystem(6)</i>	No alarm is active The alarm is occurring on the network interface The alarm is occurring on the terminal interface The alarm is occurring on data port 1 The alarm is occurring on data port 2 The alarm is a system alarm  This object identifies the interface on which the alarm is occurring.
1.3.6.1.4.1.181.2.2.1.2.0		
<b>dsSsAlarmState</b> read-only	INTEGER <i>ssStateNone(1), ssStateEcf(2), ssStateLos(3), ssStateAis(4), ssStateOof(5), ssStateBer(6), ssStateYel(7), ssStateRfa(8), ssStateRma(9), ssStateOm(10), ssStateEer(11)</i>	No alarm is active External Clock Failure Loss of Signal Alarm Indication Signal Out of Frame Bit Error Rate, E1 only Yellow Alarm, T1 only Remote Frame Alignment, E1 only Remote MultiFrame Alignment, E1 only Out of MultiFrame, E1 only Excessive Error Rate  This object identifies the alarm state of the system.
1.3.6.1.4.1.181.2.2.1.3.0		
<b>dsSsLoopback</b> read-only	INTEGER <i>ssLbkNone(1), ssLbkRemLlb(2), ssLbkRemPlb(3), ssLbkRemDp1(4), ssLbkRemDp2(5), ssLbkLlb(6), ssLbkLoc(7), ssLbkPlb(8), ssLbkTlb(9), ssLbkDp1(10), ssLbkDp2(11), ssLbkDt1(12), ssLbkDt2(13)</i>	No loopback is active Remote line loopback Remote payload loopback Remote data port 1 loopback Remote data port 2 loopback Line loopback Local loopback Payload loopback Terminal loopback Data port 1 loopback Data port 2 loopback Data terminal 1 loopback Data terminal 2 loopback  The loopback (if any) the system is currently performing.

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.1.4.0		
<b>dsSsPowerStatus</b> read-only	INTEGER <i>ssBothOff(1), ssAOnBOff(2), ssAOFFBOn(3), ssBothOn(4)</i>	A off, B off A on, B off A off, B on A on, B on
		The status of the A and B power inputs on the universal shelf.
		This is only available on DataSMART 558/588 and M-PATH 538.

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# The user reports group

## The user time counts table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.1.1		
<b>dsRpUsrTmCntTable</b> not-accessible	SEQUENCE OF DsRpUsrTmCntEntry	The User Time Counts Table. This table contains information about the number of seconds in the current 15-minute interval, the number of complete 15-minute intervals in the Interval table, and the number of days in the Day table.
1.3.6.1.4.1.181.2.2.2.1.1.1		
<b>dsRpUsrTmCntEntry</b> not-accessible	INDEX dsRpUsrTmCntIndex	An entry in the User Time Counts table that consists of the following objects:  <i>dsRpUsrTmCntIndex,</i> <i>dsRpUsrTmCntSecs,</i> <i>dsRpUsrTmCnt15Mins,</i> <i>dsRpUsrTmCntDays</i>
1.3.6.1.4.1.181.2.2.2.1.1.1.1.dsRpUsrTmCntIndex		
<b>dsRpUsrTmCntIndex</b> read-only	INTEGER 1, 2, 3	Network Interface Terminal Interface Far End Network Interface
		The index to the User Time Counts Table.
1.3.6.1.4.1.181.2.2.2.1.1.1.2.dsRpUsrTmCntIndex		
<b>dsRpUsrTmCntSecs</b> read-only	INTEGER (0..899)	The number of seconds in the current 15-minute interval.
1.3.6.1.4.1.181.2.2.2.1.1.1.3.dsRpUsrTmCntIndex		
<b>dsRpUsrTmCnt15Mins</b> read-only	INTEGER (0..96)	The number of completed 15-minute intervals in the Interval Table.
1.3.6.1.4.1.181.2.2.2.1.1.1.4.dsRpUsrTmCntIndex		
<b>dsRpUsrTmCntDays</b> read-only	INTEGER (0..7)	The number of completed days in the Day Table.

## The user current table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.1.2		
<b>dsRpUsrCurTable</b> not-accessible	SEQUENCE OF DsRpUsrCurEntry	The User Current Table. This table contains performance information from the current 15-minute interval for the Network, Terminal, and Far End Network Interfaces.
1.3.6.1.4.1.181.2.2.2.1.2.1		
<b>dsRpUsrCurEntry</b> not-accessible	INDEX <i>dsRpUsrCurIndex</i>	An entry in the User Current table that consists of the following objects:  <i>dsRpUsrCurIndex,</i> <i>dsRpUsrCurEE,</i> <i>dsRpUsrCurES,</i> <i>dsRpUsrCurBES,</i> <i>dsRpUsrCurSES,</i> <i>dsRpUsrCurUAS,</i> <i>dsRpUsrCurCSS,</i> <i>dsRpUsrCurDM,</i> <i>dsRpUsrCurStatus</i>
1.3.6.1.4.1.181.2.2.2.1.2.1.1. <i>dsRpUsrCurIndex</i>		
<b>dsRpUsrCurIndex</b> read-only	INTEGER 1, 2, 3	Network Interface Terminal Interface Far End Network Interface
		The index to the User Current Table.
1.3.6.1.4.1.181.2.2.2.1.2.1.2. <i>dsRpUsrCurIndex</i>		
<b>dsRpUsrCurEE</b> read-only	Gauge	The number of Event Errors encountered by a DS1/E1 interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.2.2.1.2.1.3. <i>dsRpUsrCurIndex</i>		
<b>dsRpUsrCurES</b> read-only	Gauge	The number of Errored Seconds encountered by a DS1/E1 interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.2.2.1.2.1.4. <i>dsRpUsrCurIndex</i>		
<b>dsRpUsrCurBES</b> read-only	Gauge	The number of Bursty Errrored Seconds encountered by a DS1/E1 interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.2.2.1.2.1.5. <i>dsRpUsrCurIndex</i>		
<b>dsRpUsrCurSES</b> read-only	Gauge	The number of Severely Errrored Seconds encountered by a DS1/E1 interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.2.2.1.2.1.6. <i>dsRpUsrCurIndex</i>		
<b>dsRpUsrCurUAS</b> read-only	Gauge	The number of Unavailable Seconds encountered by a DS1/E1 interface in the current 15-minute interval.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>																						
1.3.6.1.4.1.181.2.2.2.1.2.1.7. <i>dsRpUsrCurIndex</i>																								
<b><i>dsRpUsrCurCSS</i></b> read-only	Gauge	The number of Controlled Slip Seconds encountered by a DS1/E1 interface in the current 15-minute interval.																						
1.3.6.1.4.1.181.2.2.2.1.2.1.8. <i>dsRpUsrCurIndex</i>																								
<b><i>dsRpUsrCurDM</i></b> read-only	Gauge	The number of Degraded Minutes encountered by a DS1/E1 interface in the current 15-minute interval.																						
1.3.6.1.4.1.181.2.2.2.1.2.1.9. <i>dsRpUsrCurIndex</i>																								
<b><i>dsRpUsrCurStatus</i></b> read-only	DisplayString (SIZE (0..10))	The error conditions encountered by a DS1/E1 interface in the current 15-minute interval. The error conditions are signified by a single character. The possible values are:																						
		<table> <thead> <tr> <th>VALUE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>C</td> <td>A CRC error has been detected on the received T1/E1 signal</td> </tr> <tr> <td>B</td> <td>A bipolar (line) violation has occurred on the received T1/E1 signal</td> </tr> <tr> <td>L</td> <td>A LOS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td> </tr> <tr> <td>O</td> <td>An OOF condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td> </tr> <tr> <td>E</td> <td>An EER state has occurred on the received T1/E1 signal</td> </tr> <tr> <td>A</td> <td>An AIS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td> </tr> <tr> <td>Y</td> <td>A Yellow alarm has occurred on the received T1/E1 signal</td> </tr> <tr> <td>@</td> <td>There is an active alarm</td> </tr> <tr> <td>T</td> <td>There is a loop back, code generation, or BERT active</td> </tr> <tr> <td>N</td> <td>The unit was without power</td> </tr> </tbody> </table>	VALUE	DESCRIPTION	C	A CRC error has been detected on the received T1/E1 signal	B	A bipolar (line) violation has occurred on the received T1/E1 signal	L	A LOS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	O	An OOF condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	E	An EER state has occurred on the received T1/E1 signal	A	An AIS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	Y	A Yellow alarm has occurred on the received T1/E1 signal	@	There is an active alarm	T	There is a loop back, code generation, or BERT active	N	The unit was without power
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E	An EER state has occurred on the received T1/E1 signal																							
A	An AIS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal																							
Y	A Yellow alarm has occurred on the received T1/E1 signal																							
@	There is an active alarm																							
T	There is a loop back, code generation, or BERT active																							
N	The unit was without power																							

## The user interval table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.1.3		
<b>dsRpUsrIntvlTable</b> not-accessible	SEQUENCE OF DsRpUsrIntvlEntry	The User Interval Table. This table contains performance information for the past 24 hours, broken down by 15-minute intervals for the Network, Terminal, and Far End Network Interfaces.
1.3.6.1.4.1.181.2.2.2.1.3.1		
<b>dsRpUsrIntvlEntry</b> not-accessible	INDEX <i>dsRpUsrIntvlIndex</i> , <i>dsRpUsrIntvlNum</i>	An entry in the User Interval table that consists of the following objects:  <i>dsRpUsrIntvlIndex</i> , <i>dsRpUsrIntvlNum</i> , <i>dsRpUsrIntvlEE</i> , <i>dsRpUsrIntvlES</i> , <i>dsRpUsrIntvlBES</i> , <i>dsRpUsrIntvlSES</i> , <i>dsRpUsrIntvlUAS</i> , <i>dsRpUsrIntvlCSS</i> , <i>dsRpUsrIntvlDM</i> , <i>dsRpUsrIntvlStatus</i>
1.3.6.1.4.1.181.2.2.2.1.3.1.1. <i>dsRpUsrIntvlIndex.dsRpUsrIntvlNum</i>		
<b>dsRpUsrIntvlIndex</b> read-only	INTEGER 1, 2, 3	Network Interface Terminal Interface Far End Network Interface
		The index to the User Interval Table.
1.3.6.1.4.1.181.2.2.2.1.3.1.2. <i>dsRpUsrIntvlIndex.dsRpUsrIntvlNum</i>		
<b>dsRpUsrIntvlNum</b> read-only	INTEGER (1..96)	This is the interval number of the User Interval Table. It will be the number of completed 15-minute intervals since the unit has been powered up. After 24 hours, this value remains constant at 96 intervals.
1.3.6.1.4.1.181.2.2.2.1.3.1.3. <i>dsRpUsrIntvlIndex.dsRpUsrIntvlNum</i>		
<b>dsRpUsrIntvlEE</b> read-only	Gauge	The number of Event Errors encountered by a DS1/E1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.2.2.1.3.1.4. <i>dsRpUsrIntvlIndex.dsRpUsrIntvlNum</i>		
<b>dsRpUsrIntvlIES</b> read-only	Gauge	The number of Errored Seconds encountered by a DS1/E1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.2.2.1.3.1.5. <i>dsRpUsrIntvlIndex.dsRpUsrIntvlNum</i>		
<b>dsRpUsrIntvlBES</b> read-only	Gauge	The number of Bursty Errrored Seconds encountered by a DS1/E1 interface in one of the pervious 96 15-minute intervals.
1.3.6.1.4.1.181.2.2.2.1.3.1.6. <i>dsRpUsrIntvlIndex.dsRpUsrIntvlNum</i>		
<b>dsRpUsrIntvlSES</b> read-only	Gauge	The number of Severely Errrored Seconds encountered by a DS1/E1 interface in one of the previous 96 15-minute intervals.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.2.2.1.3.1.7. <i>dsRpUsrIntvlIndex.dsRpUsrIntvlNum</i>		
<b><i>dsRpUsrIntvlUAS</i></b> read-only	Gauge	The number of Unavailable Seconds encountered by a DS1/E1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.2.2.1.3.1.8. <i>dsRpUsrIntvlIndex.dsRpUsrIntvlNum</i>		
<b><i>dsRpUsrIntvlCSS</i></b> read-only	Gauge	The number of Controlled Slip Seconds encountered by a DS1/E1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.2.2.1.3.1.9. <i>dsRpUsrIntvlIndex.dsRpUsrIntvlNum</i>		
<b><i>dsRpUsrIntvlIDM</i></b> read-only	Gauge	The number of Degraded Minutes encountered by a DS1/E1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.2.2.1.3.1.10. <i>dsRpUsrIntvlIndex.dsRpUsrIntvlNum</i>		
<b><i>dsRpUsrIntvlStatus</i></b> read-only	DisplayString (SIZE (0..10))	The error conditions encountered by a DS1/E1 interface in one of the previous 96 15-minute intervals. The error conditions are signified by a single character. The possible values are:
	VALUE	DESCRIPTION
	C	A CRC error has been detected on the received T1/E1 signal
	B	A bipolar (line) violation has occurred on the received T1/E1 signal
	L	A LOS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal
	O	An OOF condition (but not necessarily an alarm) has occurred on the received T1/E1 signal
	E	An EER state has occurred on the received T1/E1 signal
	A	An AIS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal
	Y	A Yellow alarm has occurred on the received T1/E1 signal
	@	There is an active alarm
	T	There is a loop back, code generation, or BERT active
	N	The unit was without power

## The user total table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.1.4		
<b>dsRpUsrTotalTable</b> not-accessible	SEQUENCE OF DsRpUsrTotalEntry	The User Total Table. This table contains performance information for the past 24 hours, for the Network, Terminal, and Far End Network Interfaces. This is a rolling count. When the current 15-minute interval is up, the last entry in the interval table will be removed and the completed 15-minute interval added. At this point the Total Table will be recalculated.
1.3.6.1.4.1.181.2.2.2.1.4.1		
<b>dsRpUsrTotalEntry</b> not-accessible	INDEX <i>dsRpUsrTotalIndex</i>	An entry in the User Total table that consists of the following objects:  <i>dsRpUsrTotalIndex,</i> <i>dsRpUsrTotalEE,</i> <i>dsRpUsrTotalES,</i> <i>dsRpUsrTotalBES,</i> <i>dsRpUsrTotalSES,</i> <i>dsRpUsrTotalUAS,</i> <i>dsRpUsrTotalCSS,</i> <i>dsRpUsrTotalDM,</i> <i>dsRpUsrTotalStatus</i>
1.3.6.1.4.1.181.2.2.2.1.4.1.1. <i>dsRpUsrTotalIndex</i>		
<b>dsRpUsrTotalIndex</b> read-only	INTEGER 1, 2, 3	Network Interface Terminal Interface Far End Network Interface
		The index to the User Total Table.
1.3.6.1.4.1.181.2.2.2.1.4.1.2. <i>dsRpUsrTotalIndex</i>		
<b>dsRpUsrTotalEE</b> read-only	Gauge	The number of Event Errors encountered by a DS1/E1 interface in the past 24 hours.
1.3.6.1.4.1.181.2.2.2.1.4.1.3. <i>dsRpUsrTotalIndex</i>		
<b>dsRpUsrTotalES</b> read-only	Gauge	The number of Errored Seconds encountered by a DS1/E1 interface in the past 24 hours.
1.3.6.1.4.1.181.2.2.2.1.4.1.4. <i>dsRpUsrTotalIndex</i>		
<b>dsRpUsrTotalBES</b> read-only	Gauge	The number of Bursty Errored Seconds encountered by a DS1/E1 interface in the past 24 hours.
1.3.6.1.4.1.181.2.2.2.1.4.1.5. <i>dsRpUsrTotalIndex</i>		
<b>dsRpUsrTotalSES</b> read-only	Gauge	The number of Severely Errored Seconds encountered by a DS1/E1 interface in the past 24 hours.
1.3.6.1.4.1.181.2.2.2.1.4.1.6. <i>dsRpUsrTotalIndex</i>		
<b>dsRpUsrTotalUAS</b> read-only	Gauge	The number of Unavailable Seconds encountered by a DS1/E1 interface in the past 24 hours.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>																						
1.3.6.1.4.1.181.2.2.2.1.4.1.7. <i>dsRpUsrTotalIndex</i>																								
<b><i>dsRpUsrTotalCSS</i></b> read-only	Gauge	The number of Controlled Slip Seconds encountered by a DS1/E1 interface in the past 24 hours.																						
1.3.6.1.4.1.181.2.2.2.1.4.1.8. <i>dsRpUsrTotalIndex</i>																								
<b><i>dsRpUsrTotalDM</i></b> read-only	Gauge	The number of Degraded Minutes encountered by a DS1/E1 interface in the past 24 hours.																						
1.3.6.1.4.1.181.2.2.2.1.4.1.9. <i>dsRpUsrTotalIndex</i>																								
<b><i>dsRpUsrTotalStatus</i></b> read-only	DisplayString (SIZE (0..10))	<p>The error conditions encountered by a DS1/E1 interface in the past 24 hours. The error conditions are signified by a single character. The possible values are:</p> <table> <thead> <tr> <th>VALUE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>C</td> <td>A CRC error has been detected on the received T1/E1 signal</td> </tr> <tr> <td>B</td> <td>A bipolar (line) violation has occurred on the received T1/E1 signal</td> </tr> <tr> <td>L</td> <td>A LOS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td> </tr> <tr> <td>O</td> <td>An OOF condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td> </tr> <tr> <td>E</td> <td>An EER state has occurred on the received T1/E1 signal</td> </tr> <tr> <td>A</td> <td>An AIS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td> </tr> <tr> <td>Y</td> <td>A Yellow alarm has occurred on the received T1/E1 signal</td> </tr> <tr> <td>@</td> <td>There is an active alarm</td> </tr> <tr> <td>T</td> <td>There is a loop back, code generation, or BERT active</td> </tr> <tr> <td>N</td> <td>The unit was without power</td> </tr> </tbody> </table>	VALUE	DESCRIPTION	C	A CRC error has been detected on the received T1/E1 signal	B	A bipolar (line) violation has occurred on the received T1/E1 signal	L	A LOS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	O	An OOF condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	E	An EER state has occurred on the received T1/E1 signal	A	An AIS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	Y	A Yellow alarm has occurred on the received T1/E1 signal	@	There is an active alarm	T	There is a loop back, code generation, or BERT active	N	The unit was without power
VALUE	DESCRIPTION																							
C	A CRC error has been detected on the received T1/E1 signal																							
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O	An OOF condition (but not necessarily an alarm) has occurred on the received T1/E1 signal																							
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Y	A Yellow alarm has occurred on the received T1/E1 signal																							
@	There is an active alarm																							
T	There is a loop back, code generation, or BERT active																							
N	The unit was without power																							

## The user day table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.1.5		
<b>dsRpUsrDayTable</b> not-accessible	SEQUENCE OF DsRpUsrDayEntry	After the unit has been powered up for 24 hours, the values from the User Total Table are moved into the first slot in the User Day Table. There are seven entries in the User Day Table, so an entire week's history is maintained. The previous day is always in slot 1.
1.3.6.1.4.1.181.2.2.2.1.5.1		
<b>dsRpUsrDayEntry</b> not-accessible	INDEX <i>dsRpUsrDayIndex</i> , <i>dsRpUsrDayNum</i>	An entry in the User Day table that consists of the following objects:  <i>dsRpUsrDayIndex</i> , <i>dsRpUsrDayNum</i> , <i>dsRpUsrDayEE</i> , <i>dsRpUsrDayES</i> , <i>dsRpUsrDayBES</i> , <i>dsRpUsrDaySES</i> , <i>dsRpUsrDayUAS</i> , <i>dsRpUsrDayCSS</i> , <i>dsRpUsrDayDM</i> , <i>dsRpUsrDayStatus</i>
1.3.6.1.4.1.181.2.2.2.1.5.1.1. <i>dsRpUsrDayIndex.dsRpUsrDayNum</i>		
<b>dsRpUsrDayIndex</b> read-only	INTEGER 1, 2, 3	Network Interface Terminal Interface Far End Network Interface  The index to the User Day Table.
1.3.6.1.4.1.181.2.2.2.1.5.1.2. <i>dsRpUsrDayIndex.dsRpUsrDayNum</i>		
<b>dsRpUsrDayNum</b> read-only	INTEGER (1..7)	The User Day Table day index. The valid values are 1 day to 7 days.
1.3.6.1.4.1.181.2.2.2.1.5.1.3. <i>dsRpUsrDayIndex.dsRpUsrDayNum</i>		
<b>dsRpUsrDayEE</b> read-only	Gauge	The number of Event Errors encountered by a DS1/E1 interface in one of the previous days.
1.3.6.1.4.1.181.2.2.2.1.5.1.4. <i>dsRpUsrDayIndex.dsRpUsrDayNum</i>		
<b>dsRpUsrDayES</b> read-only	Gauge	The number of Errored Seconds encountered by a DS1/E1 interface in one of the previous days.
1.3.6.1.4.1.181.2.2.2.1.5.1.5. <i>dsRpUsrDayIndex.dsRpUsrDayNum</i>		
<b>dsRpUsrDayBES</b> read-only	Gauge	The number of Bursty Errrored Seconds encountered by a DS1/E1 interface in one of the previous days.
1.3.6.1.4.1.181.2.2.2.1.5.1.6. <i>dsRpUsrDayIndex.dsRpUsrDayNum</i>		
<b>dsRpUsrDaySES</b> read-only	Gauge	The number of Severely Errrored Seconds encountered by a DS1/E1 interface in one of the previous days.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.2.2.1.5.1.7.dsRpUsrDayIndex.dsRpUsrDayNum		
<b>dsRpUsrDayUAS</b> read-only	Gauge	The number of Unavailable Seconds encountered by a DS1/E1 interface in one of the previous days.
1.3.6.1.4.1.181.2.2.2.1.5.1.8.dsRpUsrDayIndex.dsRpUsrDayNum		
<b>dsRpUsrDayCSS</b> read-only	Gauge	The number of Controlled Slip Seconds encountered by a DS1/E1 interface in one of the previous days.
1.3.6.1.4.1.181.2.2.2.1.5.1.9.dsRpUsrDayIndex.dsRpUsrDayNum		
<b>dsRpUsrDayDM</b> read-only	Gauge	The number of Degraded Minutes encountered by a DS1/E1 interface in one of the previous days.
1.3.6.1.4.1.181.2.2.2.1.5.1.10.dsRpUsrDayIndex.dsRpUsrDayNum		
<b>dsRpUsrDayStatus</b> read-only	DisplayString (SIZE (0..10))	The error conditions encountered by a DS1/E1 interface in one of the previous days. The error conditions are signified by a single character. The possible values are:
	VALUE	DESCRIPTION
	C	A CRC error has been detected on the received T1/E1 signal
	B	A bipolar (line) violation has occurred on the received T1/E1 signal
	L	A LOS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal
	O	An OOF condition (but not necessarily an alarm) has occurred on the received T1/E1 signal
	E	An EER state has occurred on the received T1/E1 signal
	A	An AIS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal
	Y	A Yellow alarm has occurred on the received T1/E1 signal
	@	There is an active alarm
	T	There is a loop back, code generation, or BERT active
	N	The unit was without power

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## The carrier reports group

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OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.2.1.0		
<b><i>dsRpCarCntSecs</i></b> read-only	INTEGER (0..899)	The number of seconds that have elapsed in the current interval.
1.3.6.1.4.1.181.2.2.2.2.0		
<b><i>dsRpCarCnt15Mins</i></b> read-only	INTEGER (0..96)	The number of 15-minute intervals that have elapsed in the current 24 hours.

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## The carrier current table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.3.1.0		
<b><i>dsRpCarCurEE</i></b> read-only	Gauge	The number of Event Errors encountered by the Network Interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.2.2.3.2.0		
<b><i>dsRpCarCurES</i></b> read-only	Gauge	The number of Errored Seconds encountered by the Network Interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.2.2.3.3.0		
<b><i>dsRpCarCurBES</i></b> read-only	Gauge	The number of Bursty Errored Seconds encountered by the Network Interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.2.2.3.4.0		
<b><i>dsRpCarCurSES</i></b> read-only	Gauge	The number of Severely Errored Seconds encountered by the Network Interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.2.2.3.5.0		
<b><i>dsRpCarCurUAS</i></b> read-only	Gauge	The number of Unavailable Seconds encountered by the Network Interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.2.2.3.6.0		
<b><i>dsRpCarCurCSS</i></b> read-only	Gauge	The number of Controlled Slip Seconds encountered by the Network Interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.2.2.3.7.0		
<b><i>dsRpCarCurLOFC</i></b> read-only	Gauge	The Loss of Frame Count for the Network Interface in the current 15-minute interval.

## The carrier interval table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.2.4		
<b>dsRpCarIntvlTable</b> not-accessible	SEQUENCE OF DsRpCarIntvlEntry	This is the Carrier Interval Table. This table contains performance information about the Network Interface.
1.3.6.1.4.1.181.2.2.2.2.4.1		
<b>dsRpCarIntvlEntry</b> not-accessible	INDEX dsRpCarIntvlNum	An entry in the Carrier Interval table that consists of the following objects:  <i>dsRpCarIntvlNum, dsRpCarIntvlEE, dsRpCarIntvlES, dsRpCarIntvlBES, dsRpCarIntvlSES, dsRpCarIntvlUAS, dsRpCarIntvlCSS, dsRpCarIntvlLOFC</i>
1.3.6.1.4.1.181.2.2.2.2.4.1.1.dsRpCarIntvlNum		
<b>dsRpCarIntvlNum</b> read-only	INTEGER (1..96)	The number of the 15-minute interval (1-96) from the previous 24-hour period. 1 is the most recent.
1.3.6.1.4.1.181.2.2.2.2.4.1.2.dsRpCarIntvlNum		
<b>dsRpCarIntvlEE</b> read-only	Gauge	The number of Event Errors encountered by the Network Interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.2.2.2.4.1.3.dsRpCarIntvlNum		
<b>dsRpCarIntvlES</b> read-only	Gauge	The number of Errrored Seconds encountered by the Network Interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.2.2.2.4.1.4.dsRpCarIntvlNum		
<b>dsRpCarIntvlBES</b> read-only	Gauge	The number of Bursty Errrored Seconds encountered by the Network Interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.2.2.2.4.1.5.dsRpCarIntvlNum		
<b>dsRpCarIntvlSES</b> read-only	Gauge	The number of Severely Errrored Seconds encountered by the Network Interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.2.2.2.4.1.6.dsRpCarIntvlNum		
<b>dsRpCarIntvlUAS</b> read-only	Gauge	The number of Unavailable Seconds encountered by the Network Interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.2.2.2.4.1.7.dsRpCarIntvlNum		
<b>dsRpCarIntvlCSS</b> read-only	Gauge	The number of Controlled Slip Seconds encountered by the Network Interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.2.2.2.4.1.8.dsRpCarIntvlNum		
<b>dsRpCarIntvlLOFC</b> read-only	Gauge	The Loss of Frame Count for the Network Interface for one of the previous 96 15-minute intervals.

## The carrier total table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.2.5.1.0		
<b><i>dsRpCarTotalEE</i></b> read-only	Gauge	The Carrier Total Table. This table contains performance information about the Network Interface for the past 24 hours. The number of event errors encountered by the Network Interface in the past 24 hours.
1.3.6.1.4.1.181.2.2.2.2.5.2.0		
<b><i>dsRpCarTotalES</i></b> read-only	Gauge	The number of Errored Seconds encountered by the Network Interface in the past 24 hours.
1.3.6.1.4.1.181.2.2.2.2.5.3.0		
<b><i>dsRpCarTotalBES</i></b> read-only	Gauge	The number of Bursty Errored Seconds encountered by the Network Interface in the past 24 hours.
1.3.6.1.4.1.181.2.2.2.2.5.4.0		
<b><i>dsRpCarTotalSES</i></b> read-only	Gauge	The number of Severely Errored Seconds encountered by the Network Interface in the past 24 hours.
1.3.6.1.4.1.181.2.2.2.2.5.5.0		
<b><i>dsRpCarTotalUAS</i></b> read-only	Gauge	The number of Unavailable Seconds encountered by the Network Interface in the past 24 hours.
1.3.6.1.4.1.181.2.2.2.2.5.6.0		
<b><i>dsRpCarTotalCSS</i></b> read-only	Gauge	The number of Controlled Slip Seconds encountered by the Network Interface in the past 24 hours.
1.3.6.1.4.1.181.2.2.2.2.5.7.0		
<b><i>dsRpCarTotalLOFC</i></b> read-only	Gauge	The Loss of Frame Count for the Network Interface for one of the previous 96 15-minute intervals.

# The statistics reports group

## The statistics report table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.3.1		
<b>dsRpStTable</b> not-accessible	SEQUENCE OF DsRpStEntry	The Statistics Table. This table consists of statistical error counts of various DS1/E1 line conditions. These counts are maintained between power-cycles.
1.3.6.1.4.1.181.2.2.2.3.1.1		
<b>dsRpStEntry</b> not-accessible	INDEX <i>dsRpStIndex</i>	An entry in the Statistics table that consists of the following objects:  <i>dsRpStIndex,</i> <i>dsRpStEsfErrors,</i> <i>dsRpStCrcErrors,</i> <i>dsRpStOofErrors,</i> <i>dsRpStFrameBitErrors,</i> <i>dsRpStBPs,</i> <i>dsRpStControlledSlips,</i> <i>dsRpStYellowEvents,</i> <i>dsRpStAISEvents,</i> <i>dsRpStLOFEvents,</i> <i>dsRpStLOSEvents,</i> <i>dsRpStFarEndBlkErrors,</i> <i>dsRpStRemFrameAlmEvts,</i> <i>dsRpStRemMFrameAlmEvts,</i> <i>dsRpStLOTS16MFrameEvts,</i> <i>dsRpStZeroCounters</i>
1.3.6.1.4.1.181.2.2.2.3.1.1.1. <i>dsRpStIndex</i>		
<b>dsRpStIndex</b> read-only	INTEGER 1, 2, 3	Network Interface Terminal Interface Far End Network Interface  The index to the Statistics Table.
1.3.6.1.4.1.181.2.2.2.3.1.1.2. <i>dsRpStIndex</i>		
<b>dsRpStEsfErrors</b> read-only	Counter	The total number of Error Free Seconds since the counters have last been cleared.
1.3.6.1.4.1.181.2.2.2.3.1.1.3. <i>dsRpStIndex</i>		
<b>dsRpStCrcErrors</b> read-only	Counter	The total number of CRC errors since the counters have last been cleared.
1.3.6.1.4.1.181.2.2.2.3.1.1.4. <i>dsRpStIndex</i>		
<b>dsRpStOofErrors</b> read-only	Counter	The total number of Out Of Frame errors since the counters have last been cleared.

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.3.1.1.5.dsRpStIndex		
<b>dsRpStFrameBitErrors</b> read-only	Counter	The total number of Frame Bit errors since the counters have last been cleared.
1.3.6.1.4.1.181.2.2.2.3.1.1.6.dsRpStIndex		
<b>dsRpStBPs</b> read-only	Counter	The total number of Bipolar Violations since the counters have last been cleared.
1.3.6.1.4.1.181.2.2.2.3.1.1.7.dsRpStIndex		
<b>dsRpStControlledSlips</b> read-only	Counter	The total number of Controlled Slips since the counters have last been cleared.
1.3.6.1.4.1.181.2.2.2.3.1.1.8.dsRpStIndex		
<b>dsRpStYellowEvents</b> read-only	Counter	The total number of Yellow Events since the counters have last been cleared.
1.3.6.1.4.1.181.2.2.2.3.1.1.9.dsRpStIndex		
<b>dsRpStAISEvents</b> read-only	Counter	The total number of Alarm Indication Signal events since the counters have last been cleared.
1.3.6.1.4.1.181.2.2.2.3.1.1.10.dsRpStIndex		
<b>dsRpStLOFEvents</b> read-only	Counter	The total number of Loss of Frame events since the counters have last been cleared.
1.3.6.1.4.1.181.2.2.2.3.1.1.11.dsRpStIndex		
<b>dsRpStLOSEvents</b> read-only	Counter	The total number of Loss of Signal events since the counters have last been cleared.
1.3.6.1.4.1.181.2.2.2.3.1.1.12.dsRpStIndex		
<b>dsRpStFarEndBlkErrors</b> read-only	Counter	The total number of Far End Block Errors since the counters were last cleared.
1.3.6.1.4.1.181.2.2.2.3.1.1.13.dsRpStIndex		
<b>dsRpStRemFrameAlmEvts</b> read-only	Counter	The total number of Remote Frame Alarm events since the counters were last cleared.
1.3.6.1.4.1.181.2.2.2.3.1.1.14.dsRpStIndex		
<b>dsRpStRemMFrameAlmEvts</b> read-only	Counter	The total number of Remote MultiFrame Alarm events since the counters were last cleared.
1.3.6.1.4.1.181.2.2.2.3.1.1.15.dsRpStIndex		
<b>dsRpStLOTS16MFrameEvts</b> read-only	Counter	The total number of Loss of TS16MultiFrame events since the counters have been cleared.
1.3.6.1.4.1.181.2.2.2.3.1.1.16.dsRpStIndex		
<b>dsRpStZeroCounters</b> read-write	INTEGER <i>rpStZeroCountersIdle(1), rpStZeroCountersStart(2)</i>	normal state set to this value to clear the table counters

## Pagination settings

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.4.1.0		
<b><i>dsPlBreak</i></b> read-write	INTEGER <i>rpPlLineFeed(1),</i> <i>rpPlMorePrompt(2)</i>	Use linefeeds for page breaks Use 'more' prompts for page breaks  This object determines if the user interface uses page breaks or 'more' prompts when displaying information which is longer than the defined page length (e.g., output from UNLR or SCV). A page length of 0 will disable both page breaks and 'more' prompts.
1.3.6.1.4.1.181.2.2.2.4.2.0		
<b><i>dsPlLen</i></b> read-write	INTEGER (0..70)	The length of a 'page' of information. When the set number of lines have been displayed, a 'more' prompt or line-feed will be inserted (defined by <i>dsPlBreak</i> ). A page length of 0 causes output to scroll continuously without page breaks or 'more' prompts.

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## The alarm history report table

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OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.5		
<b>dsRpAhrTable</b> not-accessible	SEQUENCE OF DsRpAhrEntry	This is the Alarm History Table. It contains the text messages of the last 20 alarms.
1.3.6.1.4.1.181.2.2.2.5.1		
<b>dsRpAhrEntry</b> not-accessible	INDEX <i>dsRpAhrIndex</i>	An entry in the Alarm History table that consists of the following objects:  <i>dsRpAhrIndex</i> , <i>dsRpAhrStr</i>
1.3.6.1.4.1.181.2.2.2.5.1.1. <i>dsRpAhrIndex</i>		
<b>dsRpAhrIndex</b> read-only	INTEGER (1..20)	The Alarm History Table index. Index 1 is the most recent alarm.
1.3.6.1.4.1.181.2.2.2.5.1.2. <i>dsRpAhrIndex</i>		
<b>dsRpAhrStr</b> read-only	DisplayString (SIZE (0..80))	The alarm message in USER format.

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## The security history report table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.6		
<b>dsRpShrTable</b> not-accessible	SEQUENCE OF DsRpShrEntry	This is the Security History Report table. It contains entries for events which are considered important from a security standpoint. Examples of such events are 1) incorrect Telnet password entered and 2) source IP address not on IP Screen List. The entries are placed in chronological order, with most recent event first.
1.3.6.1.4.1.181.2.2.2.6.1		
<b>dsRpShrEntry</b> not-accessible	INDEX <i>dsRpShrIndex</i>	An entry in the Security History Report table that consists of the following objects:  <i>dsRpShrIndex</i> , <i>dsRpShrDateTime</i> , <i>dsRpShrEventType</i> , <i>dsRpShrComments</i>
1.3.6.1.4.1.181.2.2.2.6.1.1. <i>dsRpShrIndex</i>		
<b>dsRpShrIndex</b> read-only	INTEGER	The Security History Report table index. Events are in chronological order. Index 1 is the most recent event.
1.3.6.1.4.1.181.2.2.2.6.1.2. <i>dsRpShrIndex</i>		
<b>dsRpShrDateTime</b> read-only	DisplayString (SIZE (0..80))	Display string showing date & time that the security related event occurred.
1.3.6.1.4.1.181.2.2.2.6.1.3. <i>dsRpShrIndex</i>		
<b>dsRpShrEventType</b> read-only	INTEGER <i>rpShrTelnetPassword(1)</i> , <i>rpShrSrclpAddressScreen(2)</i> , <i>rpShrReadCommString(3)</i> , <i>rpShrWriteCommString(4)</i>	Incorrect Telnet password entered Source IP address not on IP Screen List Incorrect SNMP Read Community String Incorrect SNMP Write Community String  Shows what type of security related event occurred.
1.3.6.1.4.1.181.2.2.2.6.1.4. <i>dsRpShrIndex</i>		
<b>dsRpShrComments</b> read-only	DisplayString (SIZE (0..80))	Display string showing additional information specific to the type of event. For example, for events of type <i>rpShrTelnetPassword</i> , the IP address of the remote host is given.

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## Error thresholds

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OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.7.0		
<b><i>dsRpBes</i></b> read-write	INTEGER (2..63999)	The error threshold for Bursty Errorred Seconds. E1 only.
1.3.6.1.4.1.181.2.2.2.8.0		
<b><i>dsRpSes</i></b> read-write	INTEGER (3..64000)	The threshold for Severely Errorred Seconds. E1 only.
1.3.6.1.4.1.181.2.2.2.9.0		
<b><i>dsRpDm</i></b> read-write	INTEGER (1..64000)	The threshold for Degraded Minutes. E1 only.

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# The Frame-Relay reports group

## The Frame-Relay time counts table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.10.1		
<b>dsRpFrTmCntTable</b> not-accessible	SEQUENCE OF DsRpFrTmCntEntry	The FRIB Time Counts Table. This table contains information for the number of seconds in the current 2-hour interval, the number of complete 2-hour intervals in the Interval table, and the number of days in the Day table.
1.3.6.1.4.1.181.2.2.2.10.1.1		
<b>dsRpFrTmCntEntry</b> not-accessible	INDEX dsRpFrTmCntDir	An entry in the FRIB Time Counts table that consists of the following objects:  <i>dsRpFrTmCntDir,</i> <i>dsRpFrTmCntSecs,</i> <i>dsRpFrTmCnt2Hrs,</i> <i>dsRpFrTmCntDays</i>
1.3.6.1.4.1.181.2.2.2.10.1.1.1.dsRpFrTmCntDir		
<b>dsRpFrTmCntDir</b> read-only	INTEGER 1, 2	Transmit Receive
		The direction index to the FRIB Time Counts Table.
1.3.6.1.4.1.181.2.2.2.10.1.1.2.dsRpFrTmCntDir		
<b>dsRpFrTmCntSecs</b> read-only	INTEGER (0..7200)	The number of seconds in the current 2-hour interval.
1.3.6.1.4.1.181.2.2.2.10.1.1.3.dsRpFrTmCntDir		
<b>dsRpFrTmCnt2Hrs</b> read-only	INTEGER (0..12)	The number of completed 2-hour intervals in the Interval Table.
1.3.6.1.4.1.181.2.2.2.10.1.1.4.dsRpFrTmCntDir		
<b>dsRpFrTmCntDays</b> read-only	INTEGER (0..7)	The number of completed days in the Day Table.

## The Frame-Relay previous 15-minute table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.10.2		
<b>dsRpFrPre15MTable</b> not-accessible	SEQUENCE OF DsRpFrPre15MEntry	The FRIB Previous 15 Min Table. This table contains performance information from the previous 15-minute interval for both the transmit and receive directions of each VC at the Network Interface.
1.3.6.1.4.1.181.2.2.2.10.2.1		
<b>dsRpFrPre15MEntry</b> not-accessible	INDEX <i>dsRpFrPre15MDir</i> , <i>dsRpFrPre15MVcIndex</i>	An entry in the FRIB Previous 15 Min table that consists of the following objects:  <i>dsRpFrPre15MDir</i> , <i>dsRpFrPre15MVcIndex</i> , <i>dsRpFrPre15MVC</i> , <i>dsRpFrPre15MFrames</i> , <i>dsRpFrPre15MOctets</i> , <i>dsRpFrPre15MKbps</i> , <i>dsRpFrPre15MFpMax</i> , <i>dsRpFrPre15MFpAvg</i> , <i>dsRpFrPre15MFpLost</i> , <i>dsRpFrPre15MFpSent</i> , <i>dsRpFrPre15MStatus</i>
1.3.6.1.4.1.181.2.2.2.10.2.1.1. <i>dsRpFrPre15MDir.dsRpFrPre15MVcIndex</i>		
<b>dsRpFrPre15MDir</b> read-only	INTEGER 1, 2	Transmit Receive
		The direction index to the FRIB Previous 15 Min Table.
1.3.6.1.4.1.181.2.2.2.10.2.1.2. <i>dsRpFrPre15MDir.dsRpFrPre15MVcIndex</i>		
<b>dsRpFrPre15MVcIndex</b> read-only	INTEGER (1..65)	The VC index to the FRIB Previous 15 Min Table. The table has 64 entries for individual VCs, a value of 1 through 64, and 1 entry for all other VCs, a value of 65.
1.3.6.1.4.1.181.2.2.2.10.2.1.3. <i>dsRpFrPre15MDir.dsRpFrPre15MVcIndex</i>		
<b>dsRpFrPre15MVC</b> read-only	INTEGER (1..8388607)	The VC for this entry in the FRIB Previous 15 Min Table.
1.3.6.1.4.1.181.2.2.2.10.2.1.4. <i>dsRpFrPre15MDir.dsRpFrPre15MVcIndex</i>		
<b>dsRpFrPre15MFrames</b> read-only	Counter	The number of Frame Relay packets transmitted or received during the previous 15-minute interval.
1.3.6.1.4.1.181.2.2.2.10.2.1.5. <i>dsRpFrPre15MDir.dsRpFrPre15MVcIndex</i>		
<b>dsRpFrPre15MOctets</b> read-only	Counter	The number of octets transmitted or received during the previous 15-minute interval.
1.3.6.1.4.1.181.2.2.2.10.2.1.6. <i>dsRpFrPre15MDir.dsRpFrPre15MVcIndex</i>		
<b>dsRpFrPre15MKbps</b> read-only	Gauge	The Kilobit/sec rate for data transmitted or received during the previous 15-minute interval.

OID, Name, Access	Syntax	Description																
1.3.6.1.4.1.181.2.2.2.10.2.1.7. <i>dsRpFrPre15MDir.dsRpFrPre15MVcIndex</i>																		
<b><i>dsRpFrPre15MFpMax</i></b> read-only	Counter	The maximum FPING roundtrip time (in msec) of all FPINGs on this VC during the previous 15-minute interval.																
1.3.6.1.4.1.181.2.2.2.10.2.1.8. <i>dsRpFrPre15MDir.dsRpFrPre15MVcIndex</i>																		
<b><i>dsRpFrPre15MFpAvg</i></b> read-only	Gauge	The average FPING roundtrip time (in msec) of all FPINGs on this VC during the previous 15-minute interval.																
1.3.6.1.4.1.181.2.2.2.10.2.1.9. <i>dsRpFrPre15MDir.dsRpFrPre15MVcIndex</i>																		
<b><i>dsRpFrPre15MFpLost</i></b> read-only	Counter	The number of FPING responses that were not returned on this VC during the previous 15-minute interval.																
1.3.6.1.4.1.181.2.2.2.10.2.1.10. <i>dsRpFrPre15MDir.dsRpFrPre15MVcIndex</i>																		
<b><i>dsRpFrPre15MFpSent</i></b> read-only	Counter	The number of FPINGs transmitted on this VC during the previous 15-minute interval.																
1.3.6.1.4.1.181.2.2.2.10.2.1.11. <i>dsRpFrPre15MDir.dsRpFrPre15MVcIndex</i>																		
<b><i>dsRpFrPre15MStatus</i></b> read-only	DisplayString (SIZE (0..7))	The status summary of this VC during the previous 15-minute interval:  <table> <thead> <tr> <th>VALUE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>U</td> <td>VC link is UP</td> </tr> <tr> <td>D</td> <td>VC link is DOWN</td> </tr> <tr> <td>B</td> <td>At least one frame had the BECN bit set</td> </tr> <tr> <td>F</td> <td>At least one frame had the FECN bit set</td> </tr> <tr> <td>E</td> <td>At least one frame had the DE bit set</td> </tr> <tr> <td>P</td> <td>The total pipe threshold for utilization was exceeded</td> </tr> <tr> <td>V</td> <td>The roundtrip threshold for this VC was exceeded</td> </tr> </tbody> </table>	VALUE	DESCRIPTION	U	VC link is UP	D	VC link is DOWN	B	At least one frame had the BECN bit set	F	At least one frame had the FECN bit set	E	At least one frame had the DE bit set	P	The total pipe threshold for utilization was exceeded	V	The roundtrip threshold for this VC was exceeded
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P	The total pipe threshold for utilization was exceeded																	
V	The roundtrip threshold for this VC was exceeded																	

## The Frame-Relay current 15-minute table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.10.3		
<b>dsRpFrCur15MTable</b> not-accessible	SEQUENCE OF DsRpFrCur15MEntry	The FRIB Current 15 Min Table. This table contains performance information from the current 15-minute interval for both the transmit and receive directions of each VC at the Network Interface.
1.3.6.1.4.1.181.2.2.2.10.3.1		
<b>dsRpFrCur15MEntry</b> not-accessible	INDEX <i>dsRpFrCur15MDir</i> , <i>dsRpFrCur15MVcIndex</i>	An entry in the FRIB Current 15 Min table that consists of the following objects:  <i>dsRpFrCur15MDir</i> , <i>dsRpFrCur15MVcIndex</i> , <i>dsRpFrCur15MVc</i> , <i>dsRpFrCur15MFrames</i> , <i>dsRpFrCur15MOctets</i> , <i>dsRpFrCur15MKbps</i> , <i>dsRpFrCur15MFpMax</i> , <i>dsRpFrCur15MFpAvg</i> , <i>dsRpFrCur15MFpLost</i> , <i>dsRpFrCur15MFpSent</i> , <i>dsRpFrCur15MStatus</i>
1.3.6.1.4.1.181.2.2.2.10.3.1.1. <i>dsRpFrCur15MDir.dsRpFrCur15MVcIndex</i>		
<b>dsRpFrCur15MDir</b> read-only	INTEGER 1, 2	Transmit Receive
The direction index to the FRIB Current 15 Min Table.		
1.3.6.1.4.1.181.2.2.2.10.3.1.2. <i>dsRpFrCur15MDir.dsRpFrCur15MVcIndex</i>		
<b>dsRpFrCur15MVcIndex</b> read-only	INTEGER (1..65)	The VC index to the FRIB Current 15 Min Table. The table has 64 entries for individual VCs, a value of 1 through 64, and 1 entry for all other VCs, a value of 65.
1.3.6.1.4.1.181.2.2.2.10.3.1.3. <i>dsRpFrCur15MDir.dsRpFrCur15MVcIndex</i>		
<b>dsRpFrCur15MVc</b> read-only	INTEGER (1..8388607)	The VC for this entry in the FRIB Current 15 Min Table.
1.3.6.1.4.1.181.2.2.2.10.3.1.4. <i>dsRpFrCur15MDir.dsRpFrCur15MVcIndex</i>		
<b>dsRpFrCur15MFrames</b> read-only	Counter	The number of Frame Relay packets transmitted or received during the current 15-minute interval.
1.3.6.1.4.1.181.2.2.2.10.3.1.5. <i>dsRpFrCur15MDir.dsRpFrCur15MVcIndex</i>		
<b>dsRpFrCur15MOctets</b> read-only	Counter	The number of octets transmitted or received during the current 15-minute interval.
1.3.6.1.4.1.181.2.2.2.10.3.1.6. <i>dsRpFrCur15MDir.dsRpFrCur15MVcIndex</i>		
<b>dsRpFrCur15MKbps</b> read-only	Gauge	The Kilobit/sec rate for data transmitted or received during the current 15-minute interval.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>																
1.3.6.1.4.1.181.2.2.2.10.3.1.7. <i>dsRpFrCur15MDir.dsRpFrCur15MVcIndex</i>																		
<b><i>dsRpFrCur15MFpMax</i></b> read-only	Counter	The maximum FPING roundtrip time (in msec) of all FPINGs on this VC during the current 15-minute interval.																
1.3.6.1.4.1.181.2.2.2.10.3.1.8. <i>dsRpFrCur15MDir.dsRpFrCur15MVcIndex</i>																		
<b><i>dsRpFrCur15MFpAvg</i></b> read-only	Gauge	The average FPING roundtrip time (in msec) of all FPINGs on this VC during the current 15-minute interval.																
1.3.6.1.4.1.181.2.2.2.10.3.1.9. <i>dsRpFrCur15MDir.dsRpFrCur15MVcIndex</i>																		
<b><i>dsRpFrCur15MFpLost</i></b> read-only	Counter	The number of FPING responses that were not returned on this VC during the current 15-minute interval.																
1.3.6.1.4.1.181.2.2.2.10.3.1.10. <i>dsRpFrCur15MDir.dsRpFrCur15MVcIndex</i>																		
<b><i>dsRpFrCur15MFpSent</i></b> read-only	Counter	The number of FPINGs transmitted on this VC during the current 15-minute interval.																
1.3.6.1.4.1.181.2.2.2.10.3.1.11. <i>dsRpFrCur15MDir.dsRpFrCur15MVcIndex</i>																		
<b><i>dsRpFrCur15MFpRmtIp</i></b> read-only	IpAddress	The IP Address of the unit at the remote end of the VC.																
1.3.6.1.4.1.181.2.2.2.10.3.1.12. <i>dsRpFrCur15MDir.dsRpFrCur15MVcIndex</i>																		
<b><i>dsRpFrCur15MFpRmtVc</i></b> read-only	INTEGER (0..8388607)	The VC number at the remote end of the VC.																
1.3.6.1.4.1.181.2.2.2.10.3.1.13. <i>dsRpFrCur15MDir.dsRpFrCur15MVcIndex</i>																		
<b><i>dsRpFrCur15MStatus</i></b> read-only	DisplayString (SIZE (0..7))	The status summary of this VC during the current 15-minute interval:																
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P	The total pipe threshold for utilization was exceeded																	
V	The roundtrip threshold for this VC was exceeded																	

## The Frame-Relay two hour current table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.10.4		
<b>dsRpFrCur2HTable</b> not-accessible	SEQUENCE OF DsRpFrCur2HEntry	The FRIB Current 2Hr Table. This table contains performance information from the current 2-hour interval for both the transmit and receive directions of each VC at the Network Interface.
1.3.6.1.4.1.181.2.2.2.10.4.1		
<b>dsRpFrCur2HEntry</b> not-accessible	INDEX <i>dsRpFrCur2HDir</i> , <i>dsRpFrCur2HVcIndex</i>	An entry in the FRIB Current 2Hr table that consists of the following objects:  <i>dsRpFrCur2HDir</i> , <i>dsRpFrCur2HVcIndex</i> , <i>dsRpFrCur2HVc</i> , <i>dsRpFrCur2HFrames</i> , <i>dsRpFrCur2HOctets</i> , <i>dsRpFrCur2HKbps</i> , <i>dsRpFrCur2HFpMax</i> , <i>dsRpFrCur2HFpAvg</i> , <i>dsRpFrCur2HFpLost</i> , <i>dsRpFrCur2HFpSent</i> , <i>dsRpFrCur2HStatus</i>
1.3.6.1.4.1.181.2.2.2.10.4.1.1. <i>dsRpFrCur2HDir.dsRpFrCur2HVcIndex</i>		
<b>dsRpFrCur2HDir</b> read-only	INTEGER 1, 2	Transmit Receive
		The direction index to the FRIB Current 2Hr Table.
1.3.6.1.4.1.181.2.2.2.10.4.1.2. <i>dsRpFrCur2HDir.dsRpFrCur2HVcIndex</i>		
<b>dsRpFrCur2HVcIndex</b> read-only	INTEGER (1..65)	The VC index to the FRIB Current 2Hr Table. The table has 64 entries for individual VCs, a value of 1 through 64, and 1 entry for all other VCs, a value of 65.
1.3.6.1.4.1.181.2.2.2.10.4.1.3. <i>dsRpFrCur2HDir.dsRpFrCur2HVcIndex</i>		
<b>dsRpFrCur2HVc</b> read-only	INTEGER (1..8388607)	The VC for this entry in the FRIB Current 2Hr Table.
1.3.6.1.4.1.181.2.2.2.10.4.1.4. <i>dsRpFrCur2HDir.dsRpFrCur2HVcIndex</i>		
<b>dsRpFrCur2HFrames</b> read-only	Counter	The number of Frame Relay packets transmitted or received during the current 2-hour interval.
1.3.6.1.4.1.181.2.2.2.10.4.1.5. <i>dsRpFrCur2HDir.dsRpFrCur2HVcIndex</i>		
<b>dsRpFrCur2HOctets</b> read-only	Counter	The number of octets transmitted or received during the current 2-hour interval.
1.3.6.1.4.1.181.2.2.2.10.4.1.6. <i>dsRpFrCur2HDir.dsRpFrCur2HVcIndex</i>		
<b>dsRpFrCur2HKbps</b> read-only	Gauge	The Kilobit/sec rate for data transmitted or received during the current 2-hour interval.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>																
1.3.6.1.4.1.181.2.2.2.10.4.1.7. <i>dsRpFrCur2HDir.dsRpFrCur2HVcIndex</i>																		
<b><i>dsRpFrCur2HFpMax</i></b> read-only	Counter	The maximum FPING roundtrip time (in msec) of all FPINGS on this VC during the current 2-hour interval.																
1.3.6.1.4.1.181.2.2.2.10.4.1.8. <i>dsRpFrCur2HDir.dsRpFrCur2HVcIndex</i>																		
<b><i>dsRpFrCur2HFpAvg</i></b> read-only	Gauge	The average FPING roundtrip time (in msec) of all FPINGS on this VC during the current 2-hour interval.																
1.3.6.1.4.1.181.2.2.2.10.4.1.9. <i>dsRpFrCur2HDir.dsRpFrCur2HVcIndex</i>																		
<b><i>dsRpFrCur2HFpLost</i></b> read-only	Counter	The number of FPING responses that were not returned on this VC during the current 2-hour interval.																
1.3.6.1.4.1.181.2.2.2.10.4.1.10. <i>dsRpFrCur2HDir.dsRpFrCur2HVcIndex</i>																		
<b><i>dsRpFrCur2HFpSent</i></b> read-only	Counter	The number of FPINGS transmitted on this VC during the current 2-hour interval.																
1.3.6.1.4.1.181.2.2.2.10.4.1.11. <i>dsRpFrCur2HDir.dsRpFrCur2HVcIndex</i>																		
<b><i>dsRpFrCur2HStatus</i></b> read-only	DisplayString (SIZE (0..7))	The status summary of this VC during the current 2-hour interval:																
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## The Frame-Relay two hour interval table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.10.5		
<b>dsRpFrIntvl2HTable</b> not-accessible	SEQUENCE OF DsRpFrIntvl2HEntry	The User 2H Interval Table. This table contains performance information for the past 24 hours, broken down by 2-hour intervals.
1.3.6.1.4.1.181.2.2.2.10.5.1		
<b>dsRpFrIntvl2HEntry</b> not-accessible	INDEX <i>dsRpFrIntvl2HDir</i> , <i>dsRpFrIntvl2HVcIndex</i> , <i>dsRpFrIntvl2HNum</i>	An entry in the User 2H Interval table that consists of the following objects:  <i>dsRpFrIntvl2HDir</i> , <i>dsRpFrIntvl2HVcIndex</i> , <i>dsRpFrIntvl2HNum</i> , <i>dsRpFrIntvl2HVc</i> , <i>dsRpFrIntvl2HFrames</i> , <i>dsRpFrIntvl2HOctets</i> , <i>dsRpFrIntvl2HKbps</i> , <i>dsRpFrIntvl2HFpMax</i> , <i>dsRpFrIntvl2HFpAvg</i> , <i>dsRpFrIntvl2HFpLost</i> , <i>dsRpFrIntvl2HFpSent</i> , <i>dsRpFrIntvl2HStatus</i>
1.3.6.1.4.1.181.2.2.2.10.5.1.1. <i>dsRpFrIntvl2HDir.dsRpFrIntvl2HVcIndex.dsRpFrIntvl2HNum</i>		
<b>dsRpFrIntvl2HDir</b> read-only	INTEGER 1, 2	Transmit Receive
The direction index to the FRIB User 2H Interval Table.		
1.3.6.1.4.1.181.2.2.2.10.5.1.2. <i>dsRpFrIntvl2HDir.dsRpFrIntvl2HVcIndex.dsRpFrIntvl2HNum</i>		
<b>dsRpFrIntvl2HVcIndex</b> read-only	INTEGER (1..65)	The VC index to the FRIB 2H Interval Table. The table has 64 entries for individual VCs, a value of 1 through 64, and 1 entry for all other VCs, a value of 65.
1.3.6.1.4.1.181.2.2.2.10.5.1.3. <i>dsRpFrIntvl2HDir.dsRpFrIntvl2HVcIndex.dsRpFrIntvl2HNum</i>		
<b>dsRpFrIntvl2HNum</b> read-only	INTEGER (1..96)	This is the interval number of the FRIB 2H Interval Table. It will be the number of completed 2-hour intervals since the unit has been powered up. After 24 hours, this value remains constant at 12 intervals.
1.3.6.1.4.1.181.2.2.2.10.5.1.4. <i>dsRpFrIntvl2HDir.dsRpFrIntvl2HVcIndex.dsRpFrIntvl2HNum</i>		
<b>dsRpFrIntvl2HVc</b> read-only	INTEGER (1..8388607)	The VC for this entry in the FRIB 2H Interval Table.
1.3.6.1.4.1.181.2.2.2.10.5.1.5. <i>dsRpFrIntvl2HDir.dsRpFrIntvl2HVcIndex.dsRpFrIntvl2HNum</i>		
<b>dsRpFrIntvl2HFrames</b> read-only	Counter	The number of Frame Relay packets transmitted or received during one of the previous 12 2-hour intervals.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>																
1.3.6.1.4.1.181.2.2.2.10.5.1.6. <i>dsRpFrIntvl2HDir.dsRpFrIntvl2HVcIndex.dsRpFrIntvl2HNum</i>																		
<b><i>dsRpFrIntvl2HOctets</i></b> read-only	Counter	The number of octets transmitted or received during one of the previous 12 2-hour intervals.																
1.3.6.1.4.1.181.2.2.2.10.5.1.7. <i>dsRpFrIntvl2HDir.dsRpFrIntvl2HVcIndex.dsRpFrIntvl2HNum</i>																		
<b><i>dsRpFrIntvl2HKbps</i></b> read-only	Gauge	The Kilobit/sec rate for data transmitted or received during one of the previous 12 2-hour intervals.																
1.3.6.1.4.1.181.2.2.2.10.5.1.8. <i>dsRpFrIntvl2HDir.dsRpFrIntvl2HVcIndex.dsRpFrIntvl2HNum</i>																		
<b><i>dsRpFrIntvl2HFpMax</i></b> read-only	Counter	The maximum FPING roundtrip time (in msec) of all FPINGS on this VC during one of the previous 12 2-hour intervals.																
1.3.6.1.4.1.181.2.2.2.10.5.1.9. <i>dsRpFrIntvl2HDir.dsRpFrIntvl2HVcIndex.dsRpFrIntvl2HNum</i>																		
<b><i>dsRpFrIntvl2HFpAvg</i></b> read-only	Gauge	The average FPING roundtrip time (in msec) of all FPINGS on this VC during one of the previous 12 2-hour intervals.																
1.3.6.1.4.1.181.2.2.2.10.5.1.10. <i>dsRpFrIntvl2HDir.dsRpFrIntvl2HVcIndex.dsRpFrIntvl2HNum</i>																		
<b><i>dsRpFrIntvl2HFpLost</i></b> read-only	Counter	The number of FPING responses that were not returned on this VC during one of the previous 12 2-hour intervals.																
1.3.6.1.4.1.181.2.2.2.10.5.1.11. <i>dsRpFrIntvl2HDir.dsRpFrIntvl2HVcIndex.dsRpFrIntvl2HNum</i>																		
<b><i>dsRpFrIntvl2HFpSent</i></b> read-only	Counter	The number of FPINGS transmitted on this VC during one of the previous 12 2-hour intervals.																
1.3.6.1.4.1.181.2.2.2.10.5.1.12. <i>dsRpFrIntvl2HDir.dsRpFrIntvl2HVcIndex.dsRpFrIntvl2HNum</i>																		
<b><i>dsRpFrIntvl2HStatus</i></b> read-only	DisplayString (SIZE (0..7))	The status summary of this VC during the one of the previous 12 2-hour intervals:																
		<table> <thead> <tr> <th>VALUE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>U</td> <td>VC link is UP</td> </tr> <tr> <td>D</td> <td>VC link is DOWN</td> </tr> <tr> <td>B</td> <td>At least one frame had the BECN bit set</td> </tr> <tr> <td>F</td> <td>At least one frame had the FECN bit set</td> </tr> <tr> <td>E</td> <td>At least one frame had the DE bit set</td> </tr> <tr> <td>P</td> <td>The total pipe threshold for utilization was exceeded</td> </tr> <tr> <td>V</td> <td>The roundtrip threshold for this VC was exceeded</td> </tr> </tbody> </table>	VALUE	DESCRIPTION	U	VC link is UP	D	VC link is DOWN	B	At least one frame had the BECN bit set	F	At least one frame had the FECN bit set	E	At least one frame had the DE bit set	P	The total pipe threshold for utilization was exceeded	V	The roundtrip threshold for this VC was exceeded
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V	The roundtrip threshold for this VC was exceeded																	

## The Frame-Relay total table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.10.6		
<b>dsRpFrTotalTable</b> not-accessible	SEQUENCE OF DsRpFrTotalEntry	The FRIB Total Table. This table contains performance information for the past 24 hours for Frame Relay data being passed through the NI Interface. This is a rolling count. When the current 2-hour interval is up, the last entry in the interval table will be removed and the completed 2-hour interval added. At this point the Total Table will be re-calculated.
1.3.6.1.4.1.181.2.2.2.10.6.1		
<b>dsRpFrTotalEntry</b> not-accessible	INDEX <i>dsRpFrTotalDir</i> , <i>dsRpFrTotalVcIndex</i>	An entry in the FRIB Total table that consists of the following objects:  <i>dsRpFrTotalDir</i> , <i>dsRpFrTotalVcIndex</i> , <i>dsRpFrTotalVc</i> , <i>dsRpFrTotalFrames</i> , <i>dsRpFrTotalOctets</i> , <i>dsRpFrTotalKbps</i> , <i>dsRpFrTotalFpMax</i> , <i>dsRpFrTotalFpAvg</i> , <i>dsRpFrTotalFpLost</i> , <i>dsRpFrTotalFpSent</i> , <i>dsRpFrTotalStatus</i>
1.3.6.1.4.1.181.2.2.2.10.6.1.1. <i>dsRpFrTotalDir.dsRpFrTotalVcIndex</i>		
<b>dsRpFrTotalDir</b> read-only	INTEGER 1, 2	Transmit Receive
		The direction index to the FRIB Total Table.
1.3.6.1.4.1.181.2.2.2.10.6.1.2. <i>dsRpFrTotalDir.dsRpFrTotalVcIndex</i>		
<b>dsRpFrTotalVcIndex</b> read-only	INTEGER (1..65)	The VC index to the FRIB Total Table. The table has 64 entries for individual VCs, a value of 1 through 64, and 1 entry for all other VCs, a value of 65.
1.3.6.1.4.1.181.2.2.2.10.6.1.3. <i>dsRpFrTotalDir.dsRpFrTotalVcIndex</i>		
<b>dsRpFrTotalVc</b> read-only	INTEGER (1..8388607)	The VC for this entry in the FRIB Total Table.
1.3.6.1.4.1.181.2.2.2.10.6.1.4. <i>dsRpFrTotalDir.dsRpFrTotalVcIndex</i>		
<b>dsRpFrTotalFrames</b> read-only	Counter	The number of Frame Relay packets transmitted or received during the past 24 hours.
1.3.6.1.4.1.181.2.2.2.10.6.1.5. <i>dsRpFrTotalDir.dsRpFrTotalVcIndex</i>		
<b>dsRpFrTotalOctets</b> read-only	Counter	The number of octets transmitted or received during the past 24 hours.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>																
1.3.6.1.4.1.181.2.2.2.10.6.1.6.dsRpFrTotalDir.dsRpFrTotalVcIndex																		
<b>dsRpFrTotalKbps</b> read-only	Gauge	The Kilobit/sec rate for data transmitted or received during the past 24 hours.																
1.3.6.1.4.1.181.2.2.2.10.6.1.7.dsRpFrTotalDir.dsRpFrTotalVcIndex																		
<b>dsRpFrTotalFpMax</b> read-only	Counter	The maximum FPING roundtrip time (in msec) of all FPINGs on this VC during the past 24 hours.																
1.3.6.1.4.1.181.2.2.2.10.6.1.8.dsRpFrTotalDir.dsRpFrTotalVcIndex																		
<b>dsRpFrTotalFpAvg</b> read-only	Gauge	The average FPING roundtrip time (in msec) of all FPINGs on this VC during the past 24 hours.																
1.3.6.1.4.1.181.2.2.2.10.6.1.9.dsRpFrTotalDir.dsRpFrTotalVcIndex																		
<b>dsRpFrTotalFpLost</b> read-only	Counter	The number of FPING responses that were not returned on this VC during the past 24 hours.																
1.3.6.1.4.1.181.2.2.2.10.6.1.10.dsRpFrTotalDir.dsRpFrTotalVcIndex																		
<b>dsRpFrTotalFpSent</b> read-only	Counter	The number of FPINGs transmitted on this VC during the past 24 hours.																
1.3.6.1.4.1.181.2.2.2.10.6.1.11.dsRpFrTotalDir.dsRpFrTotalVcIndex																		
<b>dsRpFrTotalStatus</b> read-only	DisplayString (SIZE (0..7))	<p>The status summary of this VC during the past 24 hours:</p> <table> <thead> <tr> <th>VALUE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>U</td> <td>VC link is UP</td> </tr> <tr> <td>D</td> <td>VC link is DOWN</td> </tr> <tr> <td>B</td> <td>At least one frame had the BECN bit set</td> </tr> <tr> <td>F</td> <td>At least one frame had the FECN bit set</td> </tr> <tr> <td>E</td> <td>At least one frame had the DE bit set</td> </tr> <tr> <td>P</td> <td>The total pipe threshold for utilization was exceeded</td> </tr> <tr> <td>V</td> <td>The roundtrip threshold for this VC was exceeded</td> </tr> </tbody> </table>	VALUE	DESCRIPTION	U	VC link is UP	D	VC link is DOWN	B	At least one frame had the BECN bit set	F	At least one frame had the FECN bit set	E	At least one frame had the DE bit set	P	The total pipe threshold for utilization was exceeded	V	The roundtrip threshold for this VC was exceeded
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## The Frame-Relay day table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.10.7		
<b>dsRpFrDayTable</b> not-accessible	SEQUENCE OF DsRpFrDayEntry	After the unit has been powered up for 24 hours, the values from the FRIB Total Table are moved into the first slot in the FRIB Day Table. There are seven entries in the FRIB Day Table, so an entire week's history is maintained. The previous day is always in slot 1.
1.3.6.1.4.1.181.2.2.2.10.7.1		
<b>dsRpFrDayEntry</b> not-accessible	INDEX <i>dsRpFrDayDir</i> , <i>dsRpFrDayVcIndex</i> , <i>dsRpFrDayNum</i>	An entry in the FRIB Day table that consists of the following objects:  <i>dsRpFrDayDir</i> , <i>dsRpFrDayVcIndex</i> , <i>dsRpFrDayNum</i> , <i>dsRpFrDayVc</i> , <i>dsRpFrDayFrames</i> , <i>dsRpFrDayOctets</i> , <i>dsRpFrDayKbps</i> , <i>dsRpFrDayFpMax</i> , <i>dsRpFrDayFpAvg</i> , <i>dsRpFrDayFpLost</i> , <i>dsRpFrDayFpSent</i> , <i>dsRpFrDayStatus</i>
1.3.6.1.4.1.181.2.2.2.10.7.1.1. <i>dsRpFrDayDir.dsRpFrDayVcIndex.dsRpFrDayNum</i>		
<b>dsRpFrDayDir</b> read-only	INTEGER 1, 2	Transmit Receive
		The direction index to the FRIB Day Table.
1.3.6.1.4.1.181.2.2.2.10.7.1.2. <i>dsRpFrDayDir.dsRpFrDayVcIndex.dsRpFrDayNum</i>		
<b>dsRpFrDayVcIndex</b> read-only	INTEGER (1..65)	The VC index to the FRIB Day Table. The table has 64 entries for individual VCs, a value of 1 through 64, and 1 entry for all other VCs, a value of 65.
1.3.6.1.4.1.181.2.2.2.10.7.1.3. <i>dsRpFrDayDir.dsRpFrDayVcIndex.dsRpFrDayNum</i>		
<b>dsRpFrDayNum</b> read-only	INTEGER (1..12)	The FRIB Day Table index. The valid values are 1 to 7 days.
1.3.6.1.4.1.181.2.2.2.10.7.1.4. <i>dsRpFrDayDir.dsRpFrDayVcIndex.dsRpFrDayNum</i>		
<b>dsRpFrDayVc</b> read-only	INTEGER (1..8388607)	The VC for this entry in the FRIB Day Table.
1.3.6.1.4.1.181.2.2.2.10.7.1.5. <i>dsRpFrDayDir.dsRpFrDayVcIndex.dsRpFrDayNum</i>		
<b>dsRpFrDayFrames</b> read-only	Counter	The number of Frame Relay packets transmitted or received during one of the previous days.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>																
1.3.6.1.4.1.181.2.2.2.10.7.1.6.dsRpFrDayDir.dsRpFrDayVcIndex.dsRpFrDayNum																		
<b>dsRpFrDayOctets</b> read-only	Counter	The number of octets transmitted or received during one of the previous days.																
1.3.6.1.4.1.181.2.2.2.10.7.1.7.dsRpFrDayDir.dsRpFrDayVcIndex.dsRpFrDayNum																		
<b>dsRpFrDayKbps</b> read-only	Gauge	The Kilobit/sec rate for data transmitted or received during one of the previous days.																
1.3.6.1.4.1.181.2.2.2.10.7.1.8.dsRpFrDayDir.dsRpFrDayVcIndex.dsRpFrDayNum																		
<b>dsRpFrDayFpMax</b> read-only	Counter	The maximum FPING roundtrip time (in msec) of all FPINGS on this VC during one of the previous days.																
1.3.6.1.4.1.181.2.2.2.10.7.1.9.dsRpFrDayDir.dsRpFrDayVcIndex.dsRpFrDayNum																		
<b>dsRpFrDayFpAvg</b> read-only	Gauge	The average FPING roundtrip time (in msec) of all FPINGS on this VC during one of the previous days.																
1.3.6.1.4.1.181.2.2.2.10.7.1.10.dsRpFrDayDir.dsRpFrDayVcIndex.dsRpFrDayNum																		
<b>dsRpFrDayFpLost</b> read-only	Counter	The number of FPING responses that were not returned on this VC during one of the previous days.																
1.3.6.1.4.1.181.2.2.2.10.7.1.11.dsRpFrDayDir.dsRpFrDayVcIndex.dsRpFrDayNum																		
<b>dsRpFrDayFpSent</b> read-only	Counter	The number of FPINGS transmitted on this VC during one of the previous days.																
1.3.6.1.4.1.181.2.2.2.10.7.1.12.dsRpFrDayDir.dsRpFrDayVcIndex.dsRpFrDayNum																		
<b>dsRpFrDayStatus</b> read-only	DisplayString (SIZE (0..7))	The status summary of this VC during the one of the previous days:  <table> <thead> <tr> <th>VALUE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>U</td> <td>VC link is UP</td> </tr> <tr> <td>D</td> <td>VC link is DOWN</td> </tr> <tr> <td>B</td> <td>At least one frame had the BECN bit set</td> </tr> <tr> <td>F</td> <td>At least one frame had the FECN bit set</td> </tr> <tr> <td>E</td> <td>At least one frame had the DE bit set</td> </tr> <tr> <td>P</td> <td>The total pipe threshold for utilization was exceeded</td> </tr> <tr> <td>V</td> <td>The roundtrip threshold for this VC was exceeded</td> </tr> </tbody> </table>	VALUE	DESCRIPTION	U	VC link is UP	D	VC link is DOWN	B	At least one frame had the BECN bit set	F	At least one frame had the FECN bit set	E	At least one frame had the DE bit set	P	The total pipe threshold for utilization was exceeded	V	The roundtrip threshold for this VC was exceeded
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## The Frame-Relay utilization report table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.2.10.8		
<b>dsRpFrUrTable</b> not-accessible	SEQUENCE OF DsRpFrUrEntry	This is a utilization report on non-flag octets that have been transmitted out the network interface for each VC.
1.3.6.1.4.1.181.2.2.2.10.8.1		
<b>dsRpFrUrEntry</b> not-accessible	INDEX <i>dsRpFrUrDir,</i> <i>dsRpFrUrVcIndex</i>	An entry in the FRIB Ur table that consists of the following objects: <i>dsRpFrUrDir,</i> <i>dsRpFrUrVcIndex,</i> <i>dsRpFrUrVc,</i> <i>dsRpFrUrCIRExceeded,</i> <i>dsRpFrUrCIRExceededOctets,</i> <i>dsRpFrUrEIRExceeded,</i> <i>dsRpFrUrEIRExceededOctets</i>
1.3.6.1.4.1.181.2.2.2.10.8.1.1. <i>dsRpFrUrDir.dsRpFrUrVcIndex</i>		
<b>dsRpFrUrDir</b> read-only	INTEGER 1, 2	Transmit Receive
		The direction index to the FRIB Ur Table. Receive is currently not supported and will return a 0 for the Counter values.
1.3.6.1.4.1.181.2.2.2.10.8.1.2. <i>dsRpFrUrDir.dsRpFrUrVcIndex</i>		
<b>dsRpFrUrVcIndex</b> read-only	INTEGER	The VC index to the FRIB Ur Table. The table has 64 entries for individual VCs.
1.3.6.1.4.1.181.2.2.2.10.8.1.3. <i>dsRpFrUrDir.dsRpFrUrVcIndex</i>		
<b>dsRpFrUrVc</b> read-only	DisplayString (SIZE (0..9))	The VC for this entry in the FRIB Ur Table.
1.3.6.1.4.1.181.2.2.2.10.8.1.4. <i>dsRpFrUrDir.dsRpFrUrVcIndex</i>		
<b>dsRpFrUrCIRExceeded</b> read-only	Counter	The number of times the CIR threshold was exceeded,
1.3.6.1.4.1.181.2.2.2.10.8.1.5. <i>dsRpFrUrDir.dsRpFrUrVcIndex</i>		
<b>dsRpFrUrCIRExceededOctets</b> read-only	Counter	The number of octets that exceeded the CIR threshold.
1.3.6.1.4.1.181.2.2.2.10.8.1.6. <i>dsRpFrUrDir.dsRpFrUrVcIndex</i>		
<b>dsRpFrUrEIRExceeded</b> read-only	Counter	The number of times the EIR threshold was exceeded.
1.3.6.1.4.1.181.2.2.2.10.8.1.7. <i>dsRpFrUrDir.dsRpFrUrVcIndex</i>		
<b>dsRpFrUrEIRExceededOctets</b> read-only	Counter	The number of octets that exceeded the EIR threshold.

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## The local maintenance group

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OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.3.1.0		
<b><i>dsLmLoopback</i></b> read-write	INTEGER <i>lmLbkNone(1),</i> <i>lmLbkLine(2),</i> <i>lmLbkPayload(3),</i> <i>lmLbkLocal(4),</i> <i>lmLbkTiTest(5),</i> <i>lmLbkDp1(6),</i> <i>lmLbkDp2(7),</i> <i>lmLbkDt1(8),</i> <i>lmLbkDt2(9)</i>	No loopback is set Line loopback is set Payload loopback is set Local loopback is set TI looback is set Data port 1 loopback is set Data port 2 loopback is set Data terminal loopback on data port 1 is set Data terminal loopback on data port 2 is set  This is the type of loopback that is currently active.
1.3.6.1.4.1.181.2.2.3.2.0		
<b><i>dsLmSelfTestState</i></b> read-write	INTEGER <i>lmSelfTestIdle(1),</i> <i>lmSelfTestStart(2)</i>	normal state Set to this value to start a self test operation
1.3.6.1.4.1.181.2.2.3.3.0		
<b><i>dsLmSelfTestResults</i></b> read-only	DisplayString (SIZE (0..255))	The results of the last self test operation.

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## The remote maintenance group

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.4.1.0		
<b>dsRmLbkCode</b> read-write	INTEGER <i>rmRNone(1), rmRst1(2), rmRLLine(3), rmRPayload(4), rmRDp1(5), rmRDp2(6)</i>	No loopback is set A remote loopback reset code is currently being sent A remote Line loopback is set A remote Payload loopback is set A remote Data Port 1 loopback is set A remote Data Port 2 loopback is set  The type of remote loopback that is currently set.
1.3.6.1.4.1.181.2.2.4.2.0		
<b>dsRmTestCode</b> read-write	INTEGER <i>rmTestNone(1), rmTestQrs(2), rmTest324(3), rmTestOnes(4), rmTestZeros(5), rmTest511Dp1(6), rmTest511Dp2(7), rmTest2047Dp1(8), rmTest2047Dp2(9), rmTest2toThe23(10), rmTest2toThe15(11)</i>	No test code is being sent QRS is being sent 3-in-24 is being sent All ones is being sent All zeros is being sent 511 is being sent out data port 1 511 is being sent out data port 2 2047 is being sent out data port 1 2047 is being sent out data port 2 2 to the 23 is being sent 2 to the 15 is being sent  The type of remote test code that is currently being sent.
1.3.6.1.4.1.181.2.2.4.3.0		
<b>dsRmBertState</b> read-only	INTEGER <i>rmBertIdle(1), rmBertOtherStart(2), rmBertSearching(3), rmBertFound(4)</i>	No BERT test is active BERT was started from the control port, front panel, or Telnet BERT was started from the agent and has not yet detected the code BERT was started from the agent and has detected the code  The current BERT state.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.2.4.4.0		
<b><i>dsRmBertCode</i></b> read-write	INTEGER <i>rmBertNone(1),</i> <i>rmBertQrs(2),</i> <i>rmBert324(3),</i> <i>rmBertOnes(4),</i> <i>rmBertZeros(5),</i> <i>rmBert511Dp1(6),</i> <i>rmBert511Dp2(7),</i> <i>rmBert2047Dp1(8),</i> <i>rmBert2047Dp2(9),</i> <i>rmTest2toThe23(10),</i> <i>rmTest2toThe15(11)</i>	No BERT test is active BERT for QRS BERT for 3-in-24 BERT for all ones BERT for all zeros BERT for 511 on data port 1 BERT for 511 on data port 2 BERT for 2047 on data port 1 BERT for 2047 on data port 2 BERT for 2 to the 23 BERT for 2 to the 15
		This object controls the activation of BERT tests.
1.3.6.1.4.1.181.2.2.4.5.0		
<b><i>dsRmBertTestSecs</i></b> read-only	INTEGER (0..2147483647)	The number of seconds the requested test code has been detected since the start of the BERT.
1.3.6.1.4.1.181.2.2.4.6.0		
<b><i>dsRmBertBitErrors</i></b> read-only	INTEGER (0..2147483647)	The number of bit errors detected since the start of the BERT.
1.3.6.1.4.1.181.2.2.4.7.0		
<b><i>dsRmBertErrdSecs</i></b> read-only	INTEGER (0..2147483647)	The number of errored seconds detected since the start of the BERT.
1.3.6.1.4.1.181.2.2.4.8.0		
<b><i>dsRmBertTotalErrors</i></b> read-only	INTEGER (0..2147483647)	The number of total errors detected since the start of the BERT.
1.3.6.1.4.1.181.2.2.4.9.0		
<b><i>dsRmBertReSync</i></b> read-only	INTEGER (0..2147483647)	The number of times BERT has lost and re-acquired the pattern.

# The Frame-Relay ping group

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.4.10.1.0		
<b>dsRmFpingAction</b> write-only	INTEGER <i>rmFpingStart(1), rmFpingStop(2)</i>	Start sending FPINGS Stop sending FPINGS  The control actions for the FPING test.
1.3.6.1.4.1.181.2.2.4.10.2.0		
<b>dsRmFpingState</b> read-only	INTEGER <i>rmFpingIdle(1), rmFpingOtherStart(2), rmFpingRunning(3)</i>	No FPINGS are being generated FPINGS are being generated. The test was started via one of the other management interfaces. FPINGS are being generated. The test was started via SNMP.  The current state of the FPING tester.
1.3.6.1.4.1.181.2.2.4.10.3.0		
<b>dsRmFpingVc</b> read-write	INTEGER (0..8388607)	The VC that FPINGS will be sent on. VC values range from (0..1023) if the Frame Relay address length is 2 octets and (0..8388607) if the address length is 4 octets. Default is 500.
1.3.6.1.4.1.181.2.2.4.10.4.0		
<b>dsRmFpingFreq</b> read-write	INTEGER (5..255)	The frequency (in seconds) that FPING packets will be transmitted. The range is (5..255). Default is 5.
1.3.6.1.4.1.181.2.2.4.10.5.0		
<b>dsRmFpingLen</b> read-write	INTEGER (0..1000)	The length (in octets) of the payload portion of the FPING packets. The range is (0..1400). Default is 0.
1.3.6.1.4.1.181.2.2.4.10.6.0		
<b>dsRmFpingCur</b> read-only	INTEGER (0..2000)	The roundtrip time (in msec) of the last FPING sent.
1.3.6.1.4.1.181.2.2.4.10.7.0		
<b>dsRmFpingMin</b> read-only	INTEGER (0..2000)	The minimum roundtrip time (in msec) of all FPINGS sent during this test.
1.3.6.1.4.1.181.2.2.4.10.8.0		
<b>dsRmFpingMax</b> read-only	INTEGER (0..2000)	The maximum roundtrip time (in msec) of all FPINGS sent during this test.
1.3.6.1.4.1.181.2.2.4.10.9.0		
<b>dsRmFpingAvg</b> read-only	INTEGER (0..2000)	The average roundtrip time (in msec) of all FPINGS sent during this test.
1.3.6.1.4.1.181.2.2.4.10.10.0		
<b>dsRmFpingLost</b> read-only	INTEGER (0..65535)	The number of FPING packets lost during this test.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.2.4.10.11.0		
<b><i>dsRmFpingTotal</i></b> read-only	INTEGER (0..65535)	The total number of FPING packets transmitted during this test.
1.3.6.1.4.1.181.2.2.4.10.12.0		
<b><i>dsRmFpingRmtVc</i></b> read-only	DisplayString (SIZE (0..8))	The VC used at the remote end of the circuit.
1.3.6.1.4.1.181.2.2.4.10.13.0		
<b><i>dsRmFpingRmtIp</i></b> read-only	IpAddress	The IP address of the unit responding to FPINGS.

# The alarm configuration group

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.5.1.0		
<b>dsAcAlmMsg</b> read-write	INTEGER <i>acAlmMsgEnable(1), acAlmMsgDisable(2)</i>	enable alarm messages disable alarm messages  This object controls the displaying/sending of alarm messages.
1.3.6.1.4.1.181.2.2.5.2.0		
<b>dsAcYelAlm</b> read-write	INTEGER <i>acYelAlmEnable(1), acYelAlmDisable(2)</i>	send alarm message on incoming Yellow Alarm don't send alarm message on incoming Yellow Alarm  This object determines if incoming Yellow Alarm will cause an alarm message to be sent. The variable applies to both the Network and Terminal interfaces.
1.3.6.1.4.1.181.2.2.5.3.0		
<b>dsAcDeact</b> read-write	INTEGER (0..15)	This object controls the number of seconds an alarm condition must remain clear before the unit declares it cleared. The range is from 0 to 15 seconds.
1.3.6.1.4.1.181.2.2.5.4.0		
<b>dsAcEst</b> read-write	INTEGER (0..900)	This object determines the threshold of errored seconds that triggers an Excessive Error Rate (EER) alarm. Setting this object to zero disables errored seconds causing an EER alarm.
1.3.6.1.4.1.181.2.2.5.5.0		
<b>dsAcUst</b> read-write	INTEGER (0..900)	This object determines the threshold of unavailable seconds that triggers an Excessive Error Rate (EER) alarm. Setting this object to zero disables unavailable seconds causing an EER alarm.
1.3.6.1.4.1.181.2.2.5.6.0		
<b>dsAcSt</b> read-write	INTEGER <i>acSt15(1), acSt60(2)</i>	15-minute sliding window 60-minute sliding window  This object determines the window used to calculate whether an Excessive Error Rate (EER) alarm should be generated from errored seconds or unavailable seconds.
1.3.6.1.4.1.181.2.2.5.7.0		
<b>dsAcBerAlm</b> read-write	INTEGER <i>acBerAlmEnable(1), acBerAlmDisable(2)</i>	Enable sending BER alarms Disable sending BER alarms  This object controls the sending of a Bit Error Rate (BER) alarm. E1 only.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.2.5.8.0		
<b><i>dsAcRfaAlm</i></b> read-write	INTEGER <i>acRfaAlmEnable(1), acRfaAlmDisable(2)</i>	Enable sending RFA alarms Disable sending RFA alarms  This object controls the sending of a Remote Frame Alarm (RFA). E1 only.
1.3.6.1.4.1.181.2.2.5.9.0		
<b><i>dsAcAisAlm</i></b> read-write	INTEGER <i>acAisAlmEnable(1), acAisAlmDisable(2)</i>	Enable sending AIS alarms Disable sending AIS alarms  This object controls the sending of Alarm Indication Signal (AIS) alarms. E1 only.

## The control port configuration group

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.6.1.0		
<b><i>dsCcEcho</i></b> read-write	INTEGER <i>ccEchoEnable(1), ccEchoDisable(2)</i>	Enable control port echo Disable control port echo  This object controls character echo on the control port.
1.3.6.1.4.1.181.2.2.6.2.0		
<b><i>dsCcControlPort</i></b> read-write	INTEGER <i>ccDce(1), ccDte(2)</i>	The control port is the DCE port The control port is the DTE port  This object determines whether the control port is the DCE or DTE port.
1.3.6.1.4.1.181.2.2.6.3.0		
<b><i>dsCcBaud</i></b> read-only	INTEGER <i>cc2400(1), cc9600(2), cc19200(3), cc38400(4)</i>	2400 baud 9600 baud 19200 baud 38400 baud  The baud rate of the control port.
1.3.6.1.4.1.181.2.2.6.4.0		
<b><i>dsCcParity</i></b> read-only	INTEGER <i>ccNone(1), ccEven(2), ccOdd(3)</i>	No parity Even parity Odd parity  The parity of the control port.
1.3.6.1.4.1.181.2.2.6.5.0		
<b><i>dsCcDataBits</i></b> read-only	INTEGER <i>cc7Bit(1), cc8Bit(2)</i>	7 data bits 8 data bits  The number of data bits for the control port.
1.3.6.1.4.1.181.2.2.6.6.0		
<b><i>dsCcStopBits</i></b> read-only	INTEGER <i>cc1Bit(1), cc2Bit(2)</i>	1 stop bit 2 stop bits  The number of stop bits for the control port.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.2.6.7.0		
<b><i>dsCcDceIn</i></b> read-only	INTEGER <i>ccBothOff(1), ccRtsOnDtrOff(2), ccRtsOffDtrOn(3), ccBothOn(4)</i>	RTS off, DTR off RTS on, DTR off RTS off, DTR on RTS on, DTR on
		The input status of the DCE signals RTS and DTR.
1.3.6.1.4.1.181.2.2.6.8.0		
<b><i>dsCcDteln</i></b> read-only	INTEGER <i>ccBothOff(1), ccCtsOnDcdOff(2), ccCtsOffDcdOn(3), ccBothOn(4)</i>	CTS off, DCD off CTS on, DCD off CTS off, DCD on CTS on, DCD on
		The input status of the DTE signals CTS and DCD.

# The data port configuration group

## The data port configuration table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.7.1		
<b>dsDcTable</b> not-accessible	SEQUENCE OF DsDcEntry	The Data Port Configuration Table. This table contains information on the configuration of each of the unit's data ports.
1.3.6.1.4.1.181.2.2.7.1.1		
<b>dsDcEntry</b> not-accessible	INDEX <i>dsDcIndex</i>	An entry in the Data Port Configuration table that consists of the following objects:  <i>dsDcIndex,</i> <i>dsDcDataInvert,</i> <i>dsDcInterface,</i> <i>dsDcClockSource,</i> <i>dsDcXmtClkInvert,</i> <i>dsDcRcvClkInvert,</i> <i>dsDcIdleChar,</i> <i>dsDcLOSInput</i>
1.3.6.1.4.1.181.2.2.7.1.1.1. <i>dsDcIndex</i>		
<b>dsDcIndex</b> read-only	INTEGER (1..4)	The index to the Data Port Configuration Table. The possible values are 1 through 4.
1.3.6.1.4.1.181.2.2.7.1.1.2. <i>dsDcIndex</i>		
<b>dsDcDataInvert</b> read-write	INTEGER <i>dcDataInvertEnable(1),</i> <i>dcDataInvertDisable(2)</i>	Invert the data port signal Don't invert the data port signal  The data inversion of the data port.
1.3.6.1.4.1.181.2.2.7.1.1.3. <i>dsDcIndex</i>		
<b>dsDcInterface</b> read-write	INTEGER <i>dcV35Interface(1),</i> <i>dcEia530Interface(2),</i> <i>dcV35DSInterface(3)</i>	V.35 EIA-530 V.35 DataSMART Compatible  The type of electrical interface the data port is using.
1.3.6.1.4.1.181.2.2.7.1.1.4. <i>dsDcIndex</i>		
<b>dsDcClockSource</b> read-write	INTEGER <i>dcInternalClock(1),</i> <i>dcExternalClock(2)</i>	Use the internal clock Use the external clock  The clock source for the data port.

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.7.1.1.5. <i>dsDcIndex</i>		
<b><i>dsDcXmtClkInvert</i></b> read-write	INTEGER <i>dcXClkInvertEnable(1),</i> <i>dcXClkInvertDisable(2)</i>	Invert the transmit clock signal Don't invert the transmit clock signal
		The inversion status of the transmit clock signal for the data port.
1.3.6.1.4.1.181.2.2.7.1.1.6. <i>dsDcIndex</i>		
<b><i>dsDcRcvClkInvert</i></b> read-write	INTEGER <i>dcRClkInvertEnable(1),</i> <i>dcRClkInvertDisable(2)</i>	Invert the received clock signal Don't invert the received clock signal
		The inversion status of the received clock signal for the data port.
1.3.6.1.4.1.181.2.2.7.1.1.7. <i>dsDcIndex</i>		
<b><i>dsDcIdleChar</i></b> read-write	INTEGER <i>dc7eIdleChar(1),</i> <i>dc7fIdleChar(2),</i> <i>dcffIdleChar(3)</i>	The idle character is hex 7E The idle character is hex 7F The idle character is hex FF
		The idle character to use for the data port.
1.3.6.1.4.1.181.2.2.7.1.1.8. <i>dsDcIndex</i>		
<b><i>dsDcLOSInput</i></b> read-write	INTEGER <i>dcLosNone(1),</i> <i>dcLosRTS(2),</i> <i>dcLosDTR(3),</i> <i>dcLosBoth(4)</i>	Data port LOS is disabled LOS is declared when RTS is lost LOS is declared when DTR is lost LOS is declared when both RTS and DTR are lost
		The combination of RTS and DTR that will cause a data port Loss of Signal alarm.

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## The fractional T1 configuration group

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OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.8.1.0  <b><i>dsFcLoadXcut</i></b> not-accessible	INTEGER  <i>fcLoadXcutIdle</i> (1), <i>fcLoadXcutStartA</i> (2), <i>fcLoadXcutStartB</i> (3)	normal state Load and execute table A Load and execute table B  The Fractional Table that is active.

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## The fractional T1 configuration table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.8.2		
<b>dsFcTable</b> not-accessible	SEQUENCE OF DsFcEntry	This is the DS1/E1 Fractional Table. This table consists of configuration information about DS1/E1 fractional services.
1.3.6.1.4.1.181.2.2.8.2.1		
<b>dsFcEntry</b> not-accessible	INDEX <i>dsFcTableIndex</i> , <i>dsFcChanIndex</i>	An entry in the DS1/E1 Fractional table that consists of the following objects:  <i>dsFcTableIndex</i> , <i>dsFcChanIndex</i> , <i>dsFcChanMap</i>
1.3.6.1.4.1.181.2.2.8.2.1.1. <i>dsFcTableIndex.dsFcChanIndex</i>		
<b>dsFcTableIndex</b> read-only	INTEGER 1, 2, 3	Stored configuration A Stored configuration B Currently executing fractional table
		This is the index into the Fractional Table.
1.3.6.1.4.1.181.2.2.8.2.1.2. <i>dsFcTableIndex.dsFcChanIndex</i>		
<b>dsFcChanIndex</b> read-only	INTEGER (1..31)	This is the index of the fractional channel. DS1 has 24 channels and E1 has 32.
1.3.6.1.4.1.181.2.2.8.2.1.3. <i>dsFcTableIndex.dsFcChanIndex</i>		
<b>dsFcChanMap</b> read-write	INTEGER <i>fcChanIdle</i> (1), <i>fcChanTiData</i> (2), <i>fcChanTiVoice</i> (3), <i>fcChan56Dp1</i> (4), <i>fcChan64Dp1</i> (5), <i>fcChan56Dp2</i> (6), <i>fcChan64Dp2</i> (7), <i>fcChanDLNK</i> (8), <i>fcChanDPDL</i> (9), <i>fcChanUnav</i> (10)	The channel is idle The channel carries data and is mapped to a TI channel The channel carries voice and is mapped to a TI channel The channel is set for 56K and is mapped to data port 1 The channel is set for 64K and is mapped to data port 1 The channel is set for 56K and is mapped to data port 2 The channel is set for 64K and is mapped to data port 2 The channel is idle and set for data link communications The channel is active and also set for data link communications The channel is unavailable
		The destination and data rate of the channel.

## The fractional configuration group (cont)

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.8.3.0		
<b><i>dsFcMap16</i></b> read-write	INTEGER <i>fcMap16Used(1),</i> <i>fcMap16Unused(2)</i>	Channel 16 cannot be used for user payload data Channel 16 is available for user payload data  This object determines if channel 16 is available for user payload data. This is only possible if the unit is configured for Common Channel Signalling. E1 only.

## The frame management configuration group

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.9.1.0		
<b><i>dsFmcFrameType</i></b> read-write	INTEGER <i>fmcFrNpid(1),</i> <i>fmcFrEther(2),</i> <i>fmcAtmNpid(3),</i> <i>fmcAtmLlcSnap(4),</i> <i>fmcAtmVcMux(5),</i> <i>fmcAtmEther(6)</i>	Frame Relay NLPID encapsulation Frame Relay Ethertype encapsulation ATM DXI NLPID encapsulation ATM DXI LLC/SNAP encapsulation ATM DXI VC-based multiplexing ATM DXI Ethertype encapsulation  The frame type for packets being transmitted and received for IP connectivity.
1.3.6.1.4.1.181.2.2.9.2.0		
<b><i>dsFmcAddrOctets</i></b> read-write	INTEGER <i>fmcTwoOctets(1),</i> <i>fmcFourOctets(2)</i>	The address is 2 octets long The address is 4 octets long  The length in octets of the Frame Relay address.
1.3.6.1.4.1.181.2.2.9.3.0		
<b><i>dsFmcFcsBits</i></b> read-write	INTEGER <i>fmc16Bits(1),</i> <i>fmc32Bits(2)</i>	The FCS field is 16 bits long The FCS field is 32 bits long  The length in bits of the Frame Relay FCS.
1.3.6.1.4.1.181.2.2.9.4.0		
<b><i>dsFmcUpperBW</i></b> read-write	INTEGER (5..95)	The percent of bandwidth utilization threshold. If the threshold is exceeded, an event will be recorded in the performance data and a trap (if configured) will be sent. Valid values are 5-95 in increments of 5.
1.3.6.1.4.1.181.2.2.9.5.0		
<b><i>dsFmcFpingOper</i></b> read-write	INTEGER <i>fmcFpoEnable(1),</i> <i>fmcFpoDisable(2)</i>	The enabling and disabling of FPING operation. Valid values are Enable and Disable.
1.3.6.1.4.1.181.2.2.9.6.0		
<b><i>dsFmcFpingGen</i></b> read-write	INTEGER (1..64)	The number of distinct VC to be received on the NI before FPINGS are automatically sent out.
1.3.6.1.4.1.181.2.2.9.7.0		
<b><i>dsFmcFpingThres</i></b> read-write	INTEGER (20..2000)	The maximum roundtrip time of a FPING packet in milliseconds. If the threshold is exceeded, an event will be recorded in the performance data and a trap (if configured) will be sent. Valid values are 20-2000 in increments of 10.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.2.9.8.0		
<b><i>dsFmcFpingRst</i></b> write-only	INTEGER (0..8388607)	Reset the specified VC to an initial state where FPING connectivity is checked for. Valid values are 0-1023 for a 2 octet address field and 0-8388607 for a 4 octet address field.
1.3.6.1.4.1.181.2.2.9.9.0		
<b><i>dsFmcAddVc</i></b> write-only	INTEGER (0..8388607)	Add a VC to the list of monitored VCs.
1.3.6.1.4.1.181.2.2.9.10.0		
<b><i>dsFmcDelVc</i></b> write-only	INTEGER (0..8388607)	Delete a VC from the list of monitored VCs. Any statistics related to this VC will be moved to the 'other' category.

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## The management configuration group

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OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.10.1.0		
<b><i>dsMcNetif</i></b> read-write	INTEGER <i>mcNetNone(1),</i> <i>mcNetEthernet(2),</i> <i>mcNetPppSlip(3),</i> <i>mcNetSlip(4),</i> <i>mcNetDatalink(5),</i> <i>mcNetES(6),</i> <i>mcNetED(7),</i> <i>mcNetESD(8),</i>  <i>mcNetPSD(9),</i>  <i>mcNetSD(10),</i> <i>mcNetInband(11)</i>	No ip interface paths are active The Ethernet ip interface is active The PPP/SLIP (control ports) IP interfaces are active The SLIP (control ports) IP interface is active The data link IP interface is active The Ethernet and SLIP (control ports) IP interfaces are active The Ethernet and data link ip interfaces are active The Ethernet, SLIP (control ports), and data link IP interfaces are active The PPP/SLIP (control ports) and data link IP interfaces are active The SLIP (control ports) and data link IP interfaces are active The inband Frame Relay (NI and Data Port) IP interface is active  The management access port(s) for Telnet and SNMP.

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OID, Name, Access	Syntax	Description								
1.3.6.1.4.1.181.2.2.10.2.0										
<b>dsMcT1DLPPath</b> read-write	<p>INTEGER</p> <p><i>mcDLPPathFdl(1),</i>  <i>mcDLPPathTS1-64(2),</i>  <i>mcDLPPathTS2-64(3),</i>  <i>mcDLPPathTS3-64(4),</i>  <i>mcDLPPathTS4-64(5),</i>  <i>mcDLPPathTS5-64(6),</i>  <i>mcDLPPathTS6-64(7),</i>  <i>mcDLPPathTS7-64(8),</i>  <i>mcDLPPathTS8-64(9),</i>  <i>mcDLPPathTS9-64(10),</i>  <i>mcDLPPathTS10-64(11),</i>  <i>mcDLPPathTS11-64(12),</i>  <i>mcDLPPathTS12-64(13),</i>  <i>mcDLPPathTS13-64(14),</i>  <i>mcDLPPathTS14-64(15),</i>  <i>mcDLPPathTS15-64(16),</i>  <i>mcDLPPathTS16-64(17),</i>  <i>mcDLPPathTS17-64(18),</i>  <i>mcDLPPathTS18-64(19),</i>  <i>mcDLPPathTS19-64(20),</i>  <i>mcDLPPathTS20-64(21),</i>  <i>mcDLPPathTS21-64(22),</i>  <i>mcDLPPathTS22-64(23),</i>  <i>mcDLPPathTS23-64(24),</i>  <i>mcDLPPathTS24-64(25),</i>  <i>mcDLPPathTS1-56(26),</i>  <i>mcDLPPathTS2-56(27),</i>  <i>mcDLPPathTS3-56(28),</i>  <i>mcDLPPathTS4-56(29),</i>  <i>mcDLPPathTS5-56(30),</i>  <i>mcDLPPathTS6-56(31),</i>  <i>mcDLPPathTS7-56(32),</i>  <i>mcDLPPathTS8-56(33),</i>  <i>mcDLPPathTS9-56(34),</i>  <i>mcDLPPathTS10-56(35),</i>  <i>mcDLPPathTS11-56(36),</i>  <i>mcDLPPathTS12-56(37),</i>  <i>mcDLPPathTS13-56(38),</i>  <i>mcDLPPathTS14-56(39),</i>  <i>mcDLPPathTS15-56(40),</i>  <i>mcDLPPathTS16-56(41),</i>  <i>mcDLPPathTS17-56(42),</i>  <i>mcDLPPathTS18-56(43),</i>  <i>mcDLPPathTS19-56(44),</i>  <i>mcDLPPathTS20-56(45),</i>  <i>mcDLPPathTS21-56(46),</i>  <i>mcDLPPathTS22-56(47),</i>  <i>mcDLPPathTS23-56(48),</i>  <i>mcDLPPathTS24-56(49)</i></p>	<p>The T1 DataLink value. This configuration is used if the NETIF has a DataLink component. The possible values are:</p> <table> <thead> <tr> <th>VALUE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td><i>mcDLPPathFdl(1)</i></td><td>The DataLink will use the FDL.</td></tr> <tr> <td><i>mcDLPPathTSn-64</i></td><td>The DataLink will use TSn. If TSn is IDLE, the data rate will be set to 64K. If TSn is assigned to a Data Port, the DataLink will use 8K of TSn.</td></tr> <tr> <td><i>mcDLPPathTSn-56</i></td><td>The DataLink will use TSn. If TSn is IDLE, the data rate will be set to 56K. If TSn is assigned to a Data Port, the DataLink will use 8K of TSn.</td></tr> </tbody> </table>	VALUE	DESCRIPTION	<i>mcDLPPathFdl(1)</i>	The DataLink will use the FDL.	<i>mcDLPPathTSn-64</i>	The DataLink will use TSn. If TSn is IDLE, the data rate will be set to 64K. If TSn is assigned to a Data Port, the DataLink will use 8K of TSn.	<i>mcDLPPathTSn-56</i>	The DataLink will use TSn. If TSn is IDLE, the data rate will be set to 56K. If TSn is assigned to a Data Port, the DataLink will use 8K of TSn.
VALUE	DESCRIPTION									
<i>mcDLPPathFdl(1)</i>	The DataLink will use the FDL.									
<i>mcDLPPathTSn-64</i>	The DataLink will use TSn. If TSn is IDLE, the data rate will be set to 64K. If TSn is assigned to a Data Port, the DataLink will use 8K of TSn.									
<i>mcDLPPathTSn-56</i>	The DataLink will use TSn. If TSn is IDLE, the data rate will be set to 56K. If TSn is assigned to a Data Port, the DataLink will use 8K of TSn.									

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.2.10.3.0		
<b><i>dsMcDefRoute</i></b> read-write	IpAddress	The unit's default IP router.
1.3.6.1.4.1.181.2.2.10.4.0		
<b><i>dsMcCipAddr</i></b> read-write	IpAddress	The IP address for the unit's Control Port.
1.3.6.1.4.1.181.2.2.10.5.0		
<b><i>dsMcDipAddr</i></b> read-write	IpAddress	The IP address for the unit's Data Link.
1.3.6.1.4.1.181.2.2.10.6.0		
<b><i>dsMcCDipMask</i></b> read-write	IpAddress	The IP subnet mask for the unit's Control Port and Data Link.
1.3.6.1.4.1.181.2.2.10.7.0		
<b><i>dsMcElpAddr</i></b> read-write	IpAddress	The IP address for the unit's Ethernet Port.
1.3.6.1.4.1.181.2.2.10.8.0		
<b><i>dsMcElpMask</i></b> read-write	IpAddress	The IP subnet mask for the unit's Ethernet Port.
1.3.6.1.4.1.181.2.2.10.9.0		
<b><i>dsMcIipAddr</i></b> read-write	IpAddress	The IP address for the unit's In-Band Interface.
1.3.6.1.4.1.181.2.2.10.10.0		
<b><i>dsMcIipMask</i></b> read-write	IpAddress	The IP subnet mask for the unit's In-Band Interface.

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## The advanced management configuration group

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OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.10.11.1.0		
<b><i>dsAmcAgent</i></b> read-write	INTEGER <i>amcEnabled(1), amcDisabled(2)</i>	The SNMP agent is enabled The SNMP agent is disabled The operational status of the SMMP agent.
1.3.6.1.4.1.181.2.2.10.11.2.0		
<b><i>dsAmcSourceScreen</i></b> read-write	INTEGER <i>mclpScreen(1), mcNoScreen(2)</i>	The screening security is enabled The screening security is disabled The status of the IP source address screening security.

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## The SNMP trap table

OID, Name, Access	Syntax	Description								
1.3.6.1.4.1.181.2.2.10.11.3										
<b>dsAmcTrapTable</b> not-accessible	SEQUENCE OF DsMcTrapEntry	<p>The SNMP Trap Table. This table lists the different types of traps and allows each type to be individually enabled/disabled. Currently, the types of traps are:</p> <table> <tr> <td>Start Traps</td><td>Cold-Start and Warm-Start</td></tr> <tr> <td>Link Traps</td><td>Link-Up and Link-Down Traps</td></tr> <tr> <td>Authentication Traps</td><td>e.g. incorrect Telnet password</td></tr> <tr> <td>Enterprise Traps</td><td>e.g. NI EER Trap</td></tr> </table>	Start Traps	Cold-Start and Warm-Start	Link Traps	Link-Up and Link-Down Traps	Authentication Traps	e.g. incorrect Telnet password	Enterprise Traps	e.g. NI EER Trap
Start Traps	Cold-Start and Warm-Start									
Link Traps	Link-Up and Link-Down Traps									
Authentication Traps	e.g. incorrect Telnet password									
Enterprise Traps	e.g. NI EER Trap									
1.3.6.1.4.1.181.2.2.10.11.3.1										
<b>dsAmcTrapEntry</b> not-accessible	INDEX <i>dsAmcTrapType</i>	<p>An entry in the SNMP Trap table that consists of the following objects:</p> <p style="text-align: center;"><i>dsAmcTrapType,</i> <i>dsAmcTrapStatus</i></p>								
1.3.6.1.4.1.181.2.2.10.11.3.1.1. <i>dsAmcTrapType</i>										
<b>dsAmcTrapType</b> read-only	INTEGER <i>mcStartTraps(1),</i> <i>mcLinkTraps(2),</i> <i>mcAuthenTraps(3),</i> <i>mcEnterpriseTraps(4)</i>	<p>Cold-Start and Warm-Start Traps Link-Up and Link-Down Traps Authentication Traps. Sent for: Incorrect Telnet password, Source IP address not on IP Screen List, Incorrect SNMP Read Community String, Incorrect SNMP Write Community String Enterprise-Specific Traps</p> <p>The type of trap. There is one row in <i>dsAmcTrapTable</i> for each type of trap.</p>								
1.3.6.1.4.1.181.2.2.10.11.3.1.2. <i>dsAmcTrapType</i>										
<b>dsAmcTrapStatus</b> read-write	INTEGER <i>amcEnabled(1),</i> <i>amcDisabled(2)</i>	<p>These types of traps are enabled These types of traps are disabled</p> <p>Indicates whether the particular type of trap is enabled or disabled.</p>								

## The source address screening table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.10.11.4		
<b>dsAmcScrnTable</b> not-accessible	SEQUENCE OF DsMcScrnEntry	The Source Address Screening Table. The entries in this table are the IP addresses which are allowed to access this unit.
1.3.6.1.4.1.181.2.2.10.11.4.1		
<b>dsAmcScrnEntry</b> not-accessible	INDEX <i>dsAmcScrnIndex</i>	An entry in the Source Address Screening table that consists of the following objects:  <i>dsAmcScrnIndex</i> , <i>dsAmcScrnIpAddr</i> , <i>dsAmcScrnIpMask</i>
1.3.6.1.4.1.181.2.2.10.11.4.1.1. <i>dsAmcScrnIndex</i>		
<b>dsAmcScrnIndex</b> read-only	INTEGER (1..10)	The index to the Source Address Screening Table. Ten entries are possible.
1.3.6.1.4.1.181.2.2.10.11.4.1.2. <i>dsAmcScrnIndex</i>		
<b>dsAmcScrnIpAddr</b> read-write	IpAddress	An IP Address(es) which will be permitted to access this unit. This object is combined with <i>dsAmcScrnIpMask</i> to allow a single entry to permit access by an entire subnet.
1.3.6.1.4.1.181.2.2.10.11.4.1.3. <i>dsAmcScrnIndex</i>		
<b>dsAmcScrnIpMask</b> read-write	IpAddress	An IP subnet ffffff mask that indicates which portion of <i>dsAmcScrnIpAddr</i> must be matched to permit access. This allows a single entry to provide access by an entire IP subnet.  A mask of '255.255.255.0' means that hosts on the subnet of <i>dsAmcScrnIpAddr</i> are permitted access. A mask of '255.255.255.255' means that only the IP address which exactly matches <i>dsAmcScrnIpAddr</i> is permitted access (i.e. only a single host).

## The SNMP trap destination table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.10.11.5		
<b>dsAmcTrapDestTable</b> not-accessible	SEQUENCE OF DsMcTrapDestEntry	The SNMP Trap Destinations Table. This table lists up to 10 addresses to send SNMP traps to when alarm conditions occur.
1.3.6.1.4.1.181.2.2.10.11.5.1		
<b>dsAmcTrapDestEntry</b> not-accessible	INDEX <i>dsAmcTrapDestIndex</i>	An entry in the SNMP Trap Destinations table that consists of the following objects:  <i>dsAmcTrapDestIndex</i> , <i>dsAmcTrapDestIpAddr</i> , <i>dsAmcTrapDestVc</i> , <i>dsAmcTrapDestPort</i>
1.3.6.1.4.1.181.2.2.10.11.5.1.1. <i>dsAmcTrapDestIndex</i>		
<b>dsAmcTrapDestIndex</b> read-only	INTEGER (1..10)	The index to the SNMP Trap Destinations Table.
1.3.6.1.4.1.181.2.2.10.11.5.1.2. <i>dsAmcTrapDestIndex</i>		
<b>dsAmcTrapDestIpAddr</b> read-write	IpAddress	The IP address portion of a Trap Destination Entry, used when sending SNMP traps.
1.3.6.1.4.1.181.2.2.10.11.5.1.3. <i>dsAmcTrapDestIndex</i>		
<b>dsAmcTrapDestVc</b> read-write	INTEGER (0..8388607)	The VC portion of a Trap Destination Entry, used when sending SNMP traps.
1.3.6.1.4.1.181.2.2.10.11.5.1.4. <i>dsAmcTrapDestIndex</i>		
<b>dsAmcTrapDestPort</b> read-write	INTEGER <i>amcNIPort(1)</i> , <i>amcDPPort(2)</i>	The Port portion of a Trap Destination Entry, used when sending SNMP traps.

# The network interface configuration group

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.11.1.0		
<b>dsNcFraming</b> read-write	INTEGER <i>ncSF(1), ncESF(2), ncEricsson(3)</i>	SF (D4) framing ESF framing Ericsson framing  The type of framing being used on the Network Interface.
1.3.6.1.4.1.181.2.2.11.2.0		
<b>dsNcCoding</b> read-write	INTEGER <i>ncAmi(1), ncB8zs(2)</i>	AMI line coding B8ZS line coding  The type of line coding being used on the Network Interface.
1.3.6.1.4.1.181.2.2.11.3.0		
<b>dsNcT1403</b> read-write	INTEGER <i>ncT1403Enable(1), ncT1403Disable(2)</i>	Enable T1.403 messages Disable T1.403 messages  This object enables/disables the sending of T1.403 PRM messages.
1.3.6.1.4.1.181.2.2.11.4.0		
<b>dsNcYellow</b> read-write	INTEGER <i>ncYelEnable(1), ncYelDisable(2)</i>	Enable sending Yellow alarm Disable sending Yellow alarm  This object enables/disables sending Yellow alarm out the Network Interface upon receipt of an alarm on the Network Interface.
1.3.6.1.4.1.181.2.2.11.5.0		
<b>dsNcAddr54</b> read-write	INTEGER <i>ncAddrCsu(1), ncAddrDs(2), ncAddrBoth(3)</i>	CSU addressing mode DSU addressing mode Both CSU and DSU addressing modes  If 54016 addressing is enabled, this object determines what type of addressing the unit responds to.
1.3.6.1.4.1.181.2.2.11.6.0		
<b>dsNc54016</b> read-write	INTEGER <i>nc54016Enable(1), nc54016Disable(2)</i>	Enable 54016 addressing Disable 54016 addressing  This object determines whether the unit responds to 54016 addressing modes.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.2.11.7.0		
<b><i>dsNcLbo</i></b> read-write	INTEGER <i>ncLbo0(1),</i> <i>ncLbo1(2),</i> <i>ncLbo2(3)</i>	0.0dB line attenuation 7.5dB line attenuation 15.0 dB line attenuation  The Network Interface Line Build Out setting.
1.3.6.1.4.1.181.2.2.11.8.0		
<b><i>dsNcMF16</i></b> read-write	INTEGER <i>ncMF16Enable(1),</i> <i>ncMF16Disable(2)</i>	Enable the Time Slot 16 MultiFrame alignment signal Disable the Time Slot 16 MultiFrame alignment signal  The E1 network interface Time Slot 16 MultiFrame alignment signal setting.
1.3.6.1.4.1.181.2.2.11.9.0		
<b><i>dsNcCRC</i></b> read-write	INTEGER <i>ncCrcEnable(1),</i> <i>ncCrcDisable(2)</i>	Enable CRC generation/checking Disable CRC generation/checking  The E1 network interface CRC generation/checking setting.
1.3.6.1.4.1.181.2.2.11.10.0		
<b><i>dsNcFasAlign</i></b> read-write	INTEGER <i>ncFasWord(1),</i> <i>ncNonFasWord(2)</i>	Use the NOT-FAS word Do not use the NOT-FAS word  The E1 network interface Time Slot 0 NOT-FAS Word setting.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>	
1.3.6.1.4.1.181.2.2.11.11.0			
<b><i>dsNcE1DLPath</i></b> read-write	INTEGER <i>ncSaNone(1), ncSaBit4(2), ncSaBit5(3), ncSaBit6(4), ncSaBit7(5), ncSaBit8(6), ncTS1(7), ncTS2(8), ncTS3(9), ncTS4(10), ncTS5(11), ncTS6(12), ncTS7(13), ncTS8(14), ncTS9(15), ncTS10(16), ncTS11(17), ncTS12(18), ncTS13(19), ncTS14(20), ncTS15(21), ncTS16(22), ncTS17(23), ncTS18(24), ncTS19(25), ncTS20(26), ncTS21(27), ncTS22(28), ncTS23(29), ncTS24(30), ncTS25(31), ncTS26(32), ncTS27(33), ncTS28(34), ncTS29(35), ncTS30(36), ncTS31(37)</i>	VALUE <i>ncSaNone(1) ncSaBit4(2) ncSaBit5(3) ncSaBit6(4) ncSaBit7(5) ncSaBit8(6) ncTS1(7) ncTS2(8) ncTS3(9) ncTS4(10) ncTS5(11) ncTS6(12) ncTS7(13) ncTS8(14) ncTS9(15) ncTS10(16) ncTS11(17) ncTS12(18) ncTS13(19) ncTS14(20) ncTS15(21) ncTS16(22) ncTS17(23) ncTS18(24) ncTS19(25) ncTS20(26) ncTS21(27) ncTS22(28) ncTS23(29) ncTS24(30) ncTS25(31) ncTS26(32) ncTS27(33) ncTS28(34) ncTS29(35) ncTS30(36) ncTS31(37)</i>	DESCRIPTION No Sa bits are being used for data link communications Use Sa bit 4 for data link communications Use Sa bit 5 for data link communications Use Sa bit 6 for data link communications Use Sa bit 7 for data link communications Use Sa bit 8 for data link communications Use Time Slot <i>n</i> for data link communications.
		These are only available for E1 units with In-Band Link hardware.	
1.3.6.1.4.1.181.2.2.11.12.0			
<b><i>dsNcKA</i></b> read-write	INTEGER <i>ncFramedKeepAlive(1), ncUnFramedKeepAlive(2)</i>	Framed Keep Alive (Framed all 1s) Unframed Keep Alive (All 1s)	The type of KeepAlive signal sent by the unit during an alarm state.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.2.11.13.0		
<b><i>dsNcGenRfa</i></b> read-write	INTEGER <i>ncGenRfaEnable(1), ncGenRfaDisable(2)</i>	Enable RFA insertion Disable RFA insertion  The status of sending E1 Remote Frame Alarm into the NI during alarms.
1.3.6.1.4.1.181.2.2.11.14.0		
<b><i>dsNcPassTiRfa</i></b> read-write	INTEGER <i>ncPassTiRfaEnable(1), ncPassTiRfaDisable(2)</i>	Enable RFA re-generation Disable RFA re-generation  The status of sending the RFA received on the network interface out the terminal interface. This function is not possible on a DSU only, it must be an add/drop. This function only works if at least one channel is assigned to the TI.
1.3.6.1.4.1.181.2.2.11.15.0		
<b><i>dsNcIdle</i></b> read-write	INTEGER (0..255)	The idle code to be transmitted in the idle NI and TI channels. This code is also sent in all TI channels when the TI is experiencing an OOF.

# The system configuration group

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.12.1.0		
<b>dsScMonth</b> read-write	INTEGER (1..12)	The calendar number of the current month. 1 is January.
1.3.6.1.4.1.181.2.2.12.2.0		
<b>dsScDay</b> read-write	INTEGER (1..31)	The number of the current day.
1.3.6.1.4.1.181.2.2.12.3.0		
<b>dsScYear</b> read-write	INTEGER (0..99)	The number of the current year. 95 is 1995.
1.3.6.1.4.1.181.2.2.12.4.0		
<b>dsScHour</b> read-write	INTEGER (0..23)	The number of the current hour. 0 is 12:00am.
1.3.6.1.4.1.181.2.2.12.5.0		
<b>dsScMinutes</b> read-write	INTEGER (0..59)	The number of the current minute.
1.3.6.1.4.1.181.2.2.12.6.0		
<b>dsScName</b> read-write	DisplayString (SIZE (0..15))	The Site Name of the unit.
1.3.6.1.4.1.181.2.2.12.7.0		
<b>dsScSlotAddr</b> read-write	INTEGER (0..15)	The Kentrox-specific slot address. The 01 in the address 01:02:003.
1.3.6.1.4.1.181.2.2.12.8.0		
<b>dsScShelfAddr</b> read-write	INTEGER (0..15)	The Kentrox-specific shelf address. The 02 in the address 01:02:003.
1.3.6.1.4.1.181.2.2.12.9.0		
<b>dsScGroupAddr</b> read-write	INTEGER (0..255)	The Kentrox-specific group address. The 003 in the address 01:02:003.
1.3.6.1.4.1.181.2.2.12.10.0		
<b>dsScFrontPanel</b> read-write	INTEGER <i>scFpEnable(1), scFpDisable(2)</i>	Enable the front panel buttons Disable the front panel buttons  The status of the front panel buttons.

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.12.11.0		
<b>dsScDSCompatible</b> read-write	INTEGER <i>scDSEnable(1), scDSDisable(2)</i>	Enable the DataSMART compatibility function Disable the DataSMART compatibility function
		The status of the DataSMART compatibility function. This should be set to <i>scDSEnable(1)</i> when the far-end unit is a DataSMART 78000 series unit, but not when it is a DataSMART 72000 series unit.
1.3.6.1.4.1.181.2.2.12.12.0		
<b>dsScClockSource</b> read-write	INTEGER <i>scTerminalTiming(1), scThroughTiming(2), scInternalTiming(3), scLoopTiming(4), scDP1Timing(5), scDP2Timing(6)</i>	Use the clock coming in on the Terminal Interface Use Through timing NI Rx to TI Tx and TI Rx to NI Tx Use the internal clock Use the clock from the network Use the clock coming in on data port 1 Use the clock coming in on data port 2
		The source of the timing clock.
1.3.6.1.4.1.181.2.2.12.13.0		
<b>dsScAutologout</b> read-write	INTEGER (0..60)	The time (in minutes) to wait for a keypress before logging the current user out. If this object is set to 0, autologout is disabled.
1.3.6.1.4.1.181.2.2.12.14.0		
<b>dsScZeroPerData</b> read-write	INTEGER <i>scZallIdle(1), scZallStart(2)</i>	Normal state Zero all performance report counters
1.3.6.1.4.1.181.2.2.12.15.0		
<b>dsScWyy</b> read-only	DisplayString (SIZE (0..255))	The string returned by the user interface command WYV, What's Your Version.
1.3.6.1.4.1.181.2.2.12.16.0		
<b>dsScAutoCfg</b> read-write	INTEGER <i>scAcEnable(1), scAcDisable(2)</i>	Enable auto-configuration Disable auto-configuration
		This object enables/disables the Auto-Configuration feature, which allows units in a daisy chain to be automatically configured by the Daisy Chain Controller. This feature is only available on the plug-in versions of DataSMART.

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.12.17.0		
<b>dsScTftpSwdl</b> read-write	DisplayString (SIZE (0..255))	A text string used to initiate or check the status of a TFTP file transfer operation for doing a software download. To initiate a TFTP software download, set this variable to the value `tswdl:<i>`, where i represents the IP address of the host system. The file itself is based upon the model number. For example, a 01-72680001 would have a file of 72680.bin. Setting this variable to any other value will have no affect. Getting the value of this variable will return the status of the TFTP software download.
1.3.6.1.4.1.181.2.2.12.18.0		
<b>dsScBoot</b> read-write	INTEGER <i>scBootIdle</i> (1), <i>scBootActive</i> (2), <i>scBootInactive</i> (3)	Normal state Reboot from the executing FLASH ROM bank Reboot from the non-executing FLASH ROM bank  This variable is used to force a system reboot.

## The terminal interface configuration group

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.2.13.1.0		
<b><i>dsTcFraming</i></b> read-write	INTEGER <i>tcSF(1),</i> <i>tcESF(2),</i> <i>tcEricsson(3)</i>	SF (D4) framing ESF framing Ericsson framing  The line framing for the Terminal Interface.
1.3.6.1.4.1.181.2.2.13.2.0		
<b><i>dsTcCoding</i></b> read-write	INTEGER <i>tcAmi(1),</i> <i>tcB8zs(2)</i>	AMI line coding B8ZS line coding  The line coding for the Terminal Interface.
1.3.6.1.4.1.181.2.2.13.3.0		
<b><i>dsTcIdle</i></b> read-write	INTEGER (0..255)	The code that is sent out the idle DS0 channels of the terminal interface.
1.3.6.1.4.1.181.2.2.13.4.0		
<b><i>dsTcEqual</i></b> read-write	INTEGER <i>tcTe0(1),</i> <i>tcTe1(2),</i> <i>tcTe2(3),</i> <i>tcTe3(4),</i> <i>tcTe4(5)</i>	0-133 feet 133-266 feet 266-399 feet 399-533 feet 533-655 feet  The line equalization for the Terminal Interface.
1.3.6.1.4.1.181.2.2.13.5.0		
<b><i>dsTcMF16</i></b> read-write	INTEGER <i>tcMF16Enable(1),</i> <i>tcMF16Disable(2)</i>	Enable the Time Slot 16 MultiFrame alignment signal Disabled the Time Slot 16 MultiFrame alignment signal  The E1 terminal interface Time Slot 16 MultiFrame alignment signal setting.
1.3.6.1.4.1.181.2.2.13.6.0		
<b><i>dsTcCRC</i></b> read-write	INTEGER <i>tcCrcEnable(1),</i> <i>tcCrcDisable(2)</i>	Enable CRC generation/checking Disable CRC generation/checking  The E1 terminal interface CRC generation/checking setting.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.2.13.7.0		
<b><i>dsTcFasAlign</i></b> read-write	INTEGER <i>tcFasWord(1),</i> <i>tcNonFasWord(2)</i>	Use the NOT-FAS word Do not use the NOT-FAS word  The E1 terminal interface Time Slot 0 NOT-FAS Word setting.
1.3.6.1.4.1.181.2.2.13.8.0		
<b><i>dsTcAis</i></b> read-write	INTEGER <i>tcAisEnable(1),</i> <i>tcAisDisable(2)</i>	Enable sending AIS alarms Disable sending AIS alarms  This object controls the sending of Alarm Indication Signal (AIS) alarms.
1.3.6.1.4.1.181.2.2.13.9.0		
<b><i>dsTcGenRfa</i></b> read-write	INTEGER <i>tcGenRfaEnable(1),</i> <i>tcGenRfaDisable(2)</i>	Enable RFA insertion Disable RFA insertion  The status of sending E1 remote Frame Alarm into the TI during alarms.
1.3.6.1.4.1.181.2.2.13.10.0		
<b><i>dsTcPassTiRfa</i></b> read-write	INTEGER <i>tcPassTiRfaEnable(1),</i> <i>tcPassTiRfaDisable(2)</i>	Enable RFA re-generation Disable RFA re-generation  The status of sending the RFA received on the terminal interface out the network interface. This function is not possible on a DSU only, it must be an add/drop. This function only works if at least one channel is assigned to the TI.



# 4

# *DataSMART MAX and SPort enterprise MIB*

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The enterprise-specific MIB for the DataSMART MAX and SPort DSU/CSUs allows an SNMP manager as much control over these units as an operator using the unit's user interface. It applies to all DataSMART MAX units and the DataSMART SPort 555 and 556.

This chapter includes the following sections:

- Enterprise-specific MIB road map for the DataSMART MAX and SPort DSU/CSUs
- A complete listing of the enterprise-specific MIB for the DataSMART MAX and SPort DSU/CSUs

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# The MAX/SPort enterprise-specific MIB road map

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*SNMP MIBs are not always the easiest documents to navigate. The enterprise-specific MIB for DataSMART MAX and SPort units can be a little difficult just because of its size. This road map should enable you to more quickly find what you are looking for.*

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## MIB root down to **datasmart**

*iso(1)  
org(3)  
dod(6)  
internet(1)  
private(4)  
enterprises(1)  
adcKentrox(181)  
ktxMibs(2)  
datasmart(1)*

## The system status group

See [page 105](#)

**datasmart(1)**  
**dsMSs(1)**  
  dsMSsAlarmSource(1)  
  dsMSsAlarmState(2)  
  dsMSsLoopback(3)  
  dsMSsDpLed(4)

## The user reports group

See [page 107](#)

**dsMRp(2)**  
**dsMRpUsr(1)**  
**The user time counts table**

**dsMRpUsrTmCntTable(1)**  
**dsMRpUsrTmCntEntry(1)**  
  dsMRpUsrTmCntIndex(1)  
  dsMRpUsrTmCntSecs(2)  
  dsMRpUsrTmCnt15Mins(3)  
  dsMRpUsrTmCntDays(4)

**The user current table**

**dsMRpUsrCurTable(2)**  
**dsMRpUsrCurEntry(1)**  
  dsMRpUsrCurIndex(1)  
  dsMRpUsrCurEE(2)  
  dsMRpUsrCurES(3)  
  dsMRpUsrCurBES(4)  
  dsMRpUsrCurSES(5)  
  dsMRpUsrCurUAS(6)  
  dsMRpUsrCurCSS(7)

dsMRpUsrCurDM(8)  
dsMRpUsrCurStatus(9)

#### The user interval table

##### **dsMRpUsrIntvlTable(3)**

**dsMRpUsrIntvlEntry(1)**  
dsMRpUsrIntvlIndex(1)  
dsMRpUsrIntvlNum(2)  
dsMRpUsrIntvlEE(3)  
dsMRpUsrIntvlES(4)  
dsMRpUsrIntvlBES(5)  
dsMRpUsrIntvlSES(6)  
dsMRpUsrIntvlUAS(7)  
dsMRpUsrIntvlCSS(8)  
dsMRpUsrIntvlDM(9)  
dsMRpUsrIntvlStatus(10)

#### The user total table

##### **dsMRpUsrTotalTable(4)**

**dsMRpUsrTotalEntry(1)**  
dsMRpUsrTotalIndex(1)  
dsMRpUsrTotalEE(2)  
dsMRpUsrTotalES(3)  
dsMRpUsrTotalBES(4)  
dsMRpUsrTotalSES(5)  
dsMRpUsrTotalUAS(6)  
dsMRpUsrTotalCSS(7)  
dsMRpUsrTotalDM(8)  
dsMRpUsrTotalStatus(9)

#### The user day table

##### **dsMRpUsrDayTable(5)**

**dsMRpUsrDayEntry(1)**  
dsMRpUsrDayIndex(1)  
dsMRpUsrDayNum(2)  
dsMRpUsrDayEE(3)  
dsMRpUsrDayES(4)  
dsMRpUsrDayBES(5)  
dsMRpUsrDaySES(6)  
dsMRpUsrDayUAS(7)  
dsMRpUsrDayCSS(8)  
dsMRpUsrDayDM(9)  
dsMRpUsrDayStatus(10)

## The carrier reports group

See [page 116](#)

### **dsMRpCar(2)**

dsMRpCarCntSecs(1)  
dsMRpCarCnt15Mins(2)

#### The carrier current table

##### **dsMRpCarCur(3)**

dsMRpCarCurEE(1)  
dsMRpCarCurES(2)  
dsMRpCarCurBES(3)

dsMRpCarCurSES(4)  
dsMRpCarCurUAS(5)  
dsMRpCarCurCSS(6)  
dsMRpCarCurLOFC(7)

#### The carrier interval table

##### **dsMRpCarIntvlTable(4)**

**dsMRpCarIntvlEntry(1)**  
dsMRpCarIntvlNum(1)  
dsMRpCarIntvlEE(2)  
dsMRpCarIntvlES(3)  
dsMRpCarIntvlBES(4)  
dsMRpCarIntvlSES(5)  
dsMRpCarIntvlUAS(6)  
dsMRpCarIntvlCSS(7)  
dsMRpCarIntvlLOFC(8)

#### The carrier total table

##### **dsMRpCarTotal(5)**

dsMRpCarTotalEE(1)  
dsMRpCarTotalES(2)  
dsMRpCarTotalBES(3)  
dsMRpCarTotalSES(4)  
dsMRpCarTotalUAS(5)  
dsMRpCarTotalCSS(6)  
dsMRpCarTotalLOFC(7)

### **The statistics report group**

See [page 121](#)

#### **dsMRpStat(3)**

##### The statistics report table

##### **dsMRpStTable(1)**

**dsMRpStEntry(1)**  
dsMRpStIndex(1)  
dsMRpStEsfErrors(2)  
dsMRpStCrcErrors(3)  
dsMRpStOofErrors(4)  
dsMRpStFrameBitErrors(5)  
dsMRpStBPVs(6)  
dsMRpStControlledSlips(7)  
dsMRpStYellowEvents(8)  
dsMRpStAISEvents(9)  
dsMRpStLOFEvents(10)  
dsMRpStLOSEvents(11)  
dsMRpStLOPowerEvents(12)  
dsMRpStFarEndBlkErrors(13)  
dsMRpStRemFrameAlmEvts(14)  
dsMRpStRemMFrameAlmEvts(15)  
dsMRpStLOTS16MFrameEvts(16)  
dsMRpStZeroCounters(17)

## Pagination settings

(for the user interface)

See [page 124](#)

### **dsMRpPl(4)**

dsMPIBreak(1)  
dsMPILen(2)

## The alarm history report table

See [page 125](#)

### **dsMRpAhrTable(5)**

**dsMRpAhrEntry(1)**  
dsMRpAhrIndex(1)  
dsMRpAhrStr(2)

## Error thresholds

See [page 126](#)

### dsMRpBes(6)

dsMRpSes(7)  
dsMRpDm(8)

## The local maintenance group

See [page 127](#)

### **dsMLm(3)**

dsMLmLoopback(1)  
dsMLmSelfTestState(2)  
dsMLmSelfTestResults(3)

## The remote maintenance group

See [page 128](#)

### **dsMRm(4)**

dsMRmLbkCode(1)  
dsMRmTestCode(2)  
dsMRmBertState(3)  
dsMRmBertCode(4)  
dsMRmBertTestSecs(5)  
dsMRmBertBitErrors(6)  
dsMRmBertErrdSecs(7)  
dsMRmBertTotalErrors(8)  
dsMRmBertReSync(9)

## The alarm configuration group

See [page 130](#)

### **dsMAc(5)**

dsMAcAlmMsg(1)  
dsMAcAlmFormat(2)  
dsMAcYelAlm(3)  
dsMAcDeact(4)  
dsMAcEst(5)  
dsMAcUst(6)  
dsMAcSt(7)  
dsMAcBerAlm(8)  
dsMAcRfaAlm(9)  
dsMAcAisAlm(10)

## The control port configuration group

See [page 132](#)

### **dsMCc(6)**

dsMCcEcho(1)  
dsMCcControlPort(2)  
dsMCcBaud(3)  
dsMCcParity(4)  
dsMCcDataBits(5)  
dsMCcStopBits(6)  
dsMCcDceIn(7)  
dsMCcDteIn(8)

## **The data port configuration group**

See [page 134](#)

**dsMDc(7)**  
**The data port configuration table**

**dsMDcTable(1)**

**dsMDcEntry(1)**  
dsMDcIndex(1)  
dsMDcDataInvert(2)  
dsMDcInterface(3)  
dsMDcClockSource(4)  
dsMDcXmtClkInvert(5)  
dsMDcRcvClkInvert(6)  
dsMDcIdleChar(7)  
dsMDcLOSInput(8)

## **The fractional T1 configuration group**

See [page 136](#)

**dsMFc(8)**  
**dsMFcLoadXcute(1)**  
**The fractional T1 configuration table**

**dsMFcTable(2)**

**dsMFcEntry(2)**  
dsMFcTableIndex(1)  
dsMFcChanIndex(2)  
dsMFcChanMap(3)

## **The management configuration group**

See [page 138](#)

**dsMMc(9)**  
dsMMcAgent(1)  
dsMMcTrapCommStr(2)  
dsMMcReadCommStr(3)  
dsMMcWriteCommStr(4)  
dsMMcTelnetPsswd(5)  
dsMMcSourceScreen(6)  
dsMMcNetif(7)  
dsMMcIpAddr(8)  
dsMMcIpMask(9)  
dsMMcDefRoute(10)

**The source address screening table**

**dsMMcScrnTable(11)**

**dsMMcScrnEntry(1)**  
dsMMcScrnIndex(1)  
dsMMcScrnIpAddr(2)

**The SNMP trap destination table**

**dsMMcTrapTable(12)**

**dsMMcTrapEntry(1)**  
dsMMcTrapIndex(1)  
dsMMcTrapIpAddr(2)

**Management address/mask objects**

dsMMcSIPAddr(13)  
dsMMcSIPMask(14)  
dsMMcEIIPAddr(15)

dsMMcEIpMask(16)

**The network  
interface  
configuration group**  
See [page 141](#)

**dsMNC(10)**  
dsMNCFraming(1)  
dsMNCCoding(2)  
dsMNT1403(3)  
dsMNCYellow(4)  
dsMNCAddr54(5)  
dsMNC54016(6)  
dsMNLbo(7)  
dsMNCMF16(8)  
dsMNC\_CRC(9)  
dsMNCFasAlign(10)  
dsMNCSaBit(11)  
dsMNCGenRfa(12)  
dsMNCPassTiRfa(13)  
dsMNCIdle(14)

**The password  
configuration group**  
See [page 145](#)

**dsMPc(11)**  
**The password configuration table**

**dsMPcTable(1)**  
**dsMPcEntry(1)**  
dsMPcIndex(1)  
dsMPcPasswd(2)  
dsMPcPriv(3)  
dsMPcDelete(4)

**The system  
configuration group**  
See [page 146](#)

**dsMSc(12)**  
dsMScMonth(1)  
dsMScDay(2)  
dsMScYear(3)  
dsMScHour(4)  
dsMScMinutes(5)  
dsMScName(6)  
dsMScSlotAddr(7)  
dsMScShelfAddr(8)  
dsMScGroupAddr(9)  
dsMScFrontPanel(10)  
dsMScDSCompatible(11)  
dsMScClockSource(12)  
dsMScAutologout(13)  
dsMScZeroPerData(14)  
dsMScWyv(15)  
dsMScResetDeflts(16)  
dsMScAutoCfg(17)

**The terminal  
interface  
configuration group**  
See [page 148](#)

**dsMTc(13)**  
dsMTcFraming(1)  
dsMTcCoding(2)  
dsMTcIdle(3)

```
dsMTcEqual(4)
dsMTcMF16(5)
dsMTcCRC(6)
dsMTcFasAlign(7)
dsMTcAis(8)
dsMTcGenRfa(9)
dsMTcPassTiRfa(10)
```

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## The system status group

Table 3

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.1.1.0		
<b>dsMSsAlarmSource</b> read-only	INTEGER <i>ssSourceNone(1), ssSourceNi(2), ssSourceTi(3), ssSourceDp1(4), ssSourceDp2(5), ssSourceDp3(6), ssSourceDp4(7), ssSourceSystem(8)</i>	No alarm is active The alarm is occurring on the network interface The alarm is occurring on the terminal interface The alarm is occurring on data port 1 The alarm is occurring on data port 2 The alarm is occurring on data port 3 The alarm is occurring on data port 4 The alarm is a system alarm
		If the alarm is occurring on a port, this object states which port.
1.3.6.1.4.1.181.2.1.1.2.0		
<b>dsMSsAlarmState</b> read-only	INTEGER <i>ssStateNone(1), ssStateEcf(2), ssStateLos(3), ssStateAis(4), ssStateOof(5), ssStateBer(6), ssStateYel(7), ssStateRfa(8), ssStateRma(9), ssStateOmf(10), ssStateEer(11)</i>	No alarm is active External Clock Failure Loss of Signal Alarm Indication Signal Out of Frame Bit Error Rate, E1 only Yellow Alarm, T1 only Remote Frame Alignment, E1 only Remote MultiFrame Alignment, E1 only Out of MultiFrame, E1 only Excessive Error Rate
		The alarm state the system is currently in.

---

**Table 3**

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.1.1.3.0		
<b><i>dsMSsLoopback</i></b> read-only	INTEGER <i>ssLbkNone(1), ssLbkRemLb(2), ssLbkRemPlb(3), ssLbkRemDp1(4), ssLbkRemDp2(5), ssLbkRemDp3(6), ssLbkRemDp4(7), ssLbkLlb(8), ssLbkLoc(9), ssLbkPlb(10), ssLbkTlb(11), ssLbkDp1(12), ssLbkDp2(13), ssLbkDp3(14), ssLbkDp4(15), ssLbkDt1(16), ssLbkDt2(17), ssLbkDt3(18), ssLbkDt4(19)</i>	No loopback is active Remote line loopback Remote payload loopback Remote data port 1 loopback Remote data port 2 loopback Remote data port 3 loopback Remote data port 4 loopback Line loopback Local loopback Payload loopback Terminal loopback Data port 1 loopback Data port 2 loopback Data port 3 loopback Data port 4 loopback Data terminal 1 loopback Data terminal 2 loopback Data terminal 3 loopback Data terminal 4 loopback
		The loopback the system is currently performing.
1.3.6.1.4.1.181.2.1.1.4.0		
<b><i>dsMSsDpLed</i></b> read-write	INTEGER <i>ssDpLed1(1), ssDpLed2(2), ssDpLed3(3), ssDpLed4(4)</i>	The data port that the front panel LEDs are set to.  This object really has no remote monitoring function since you have to be looking at the unit.

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# The user reports group

## The user time counts table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.1.1		
<b>dsMRpUsrTmCntTable</b> not-accessible	SEQUENCE OF DsMRpUsrTm- CntEntry	The User Time Counts table. This table contains information about the number of seconds in the current 15-minute interval, the number of complete 15-minute intervals in the Interval table, and the number of days in the Day table.
1.3.6.1.4.1.181.2.1.2.1.1.1		
<b>dsMRpUsrTmCntEntry</b> not-accessible	INDEX dsMRpUsrTm- CntIndex	An entry in the User Time Counts table that consists of the following objects:  <i>dsMRpUsrTmCntIndex,</i> <i>dsMRpUsrTmCntSecs,</i> <i>dsMRpUsrTmCnt15Mins,</i> <i>dsMRpUsrTmCntDays</i>
1.3.6.1.4.1.181.2.1.2.1.1.1.1.dsMRpUsrTmCntIndex		
<b>dsMRpUsrTmCntIndex</b> read-only	INTEGER 1, 2, 3	Network Interface Terminal Interface Far End Network Interface
		The index to the User Time Counts table.
1.3.6.1.4.1.181.2.1.2.1.1.1.2.dsMRpUsrTmCntIndex		
<b>dsMRpUsrTmCntSecs</b> read-only	INTEGER (0..899)	The number of seconds in the current 15-minute interval.
1.3.6.1.4.1.181.2.1.2.1.1.1.3.dsMRpUsrTmCntIndex		
<b>dsMRpUsrTmCnt15Mins</b> read-only	INTEGER (0..96)	The number of completed 15-minute intervals in the Interval table.
1.3.6.1.4.1.181.2.1.2.1.1.1.4.dsMRpUsrTmCntIndex		
<b>dsMRpUsrTmCntDays</b> read-only	INTEGER (0..7)	The number of completed days in the Day table.

## The user current table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.1.2		
<b>dsMRpUsrCurTable</b> not-accessible	SEQUENCE OF DsMRpUsrCurEntry	The User Current table. This table contains performance information from the current 15-minute interval for the Network, Terminal, and Far End Network Interfaces.
1.3.6.1.4.1.181.2.1.2.1.2.1		
<b>dsMRpUsrCurEntry</b> not-accessible	INDEX dsMRpUsrCurIndex	An entry in the User Current table that consists of the following objects:  <i>dsMRpUsrCurIndex,</i> <i>dsMRpUsrCurEE,</i> <i>dsMRpUsrCurES,</i> <i>dsMRpUsrCurBES,</i> <i>dsMRpUsrCurSES,</i> <i>dsMRpUsrCurUAS,</i> <i>dsMRpUsrCurCSS,</i> <i>dsMRpUsrCurDM,</i> <i>dsMRpUsrCurStatus</i>
1.3.6.1.4.1.181.2.1.2.1.2.1.1.dsMRpUsrCurIndex		
<b>dsMRpUsrCurIndex</b> read-only	INTEGER 1, 2, 3	Network Interface Terminal Interface Far End Network Interface
		The index to the User Current table.
1.3.6.1.4.1.181.2.1.2.1.2.1.2.dsMRpUsrCurIndex		
<b>dsMRpUsrCurEE</b> read-only	Gauge	The number of Event Errors encountered by a DS1/E1 interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.1.2.1.2.1.3.dsMRpUsrCurIndex		
<b>dsMRpUsrCurES</b> read-only	Gauge	The number of Errored Seconds encountered by a DS1/E1 interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.1.2.1.2.1.4.dsMRpUsrCurIndex		
<b>dsMRpUsrCurBES</b> read-only	Gauge	The number of Bursty Errrored Seconds encountered by a DS1/E1 interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.1.2.1.2.1.5.dsMRpUsrCurIndex		
<b>dsMRpUsrCurSES</b> read-only	Gauge	The number of Severely Errrored Seconds encountered by a DS1/E1 interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.1.2.1.2.1.6.dsMRpUsrCurIndex		
<b>dsMRpUsrCurUAS</b> read-only	Gauge	The number of Unavailable Seconds encountered by a DS1/E1 interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.1.2.1.2.1.7.dsMRpUsrCurIndex		
<b>dsMRpUsrCurCSS</b> read-only	Gauge	The number of Controlled Slip Seconds encountered by a DS1/E1 interface in the current 15-minute interval.

## The user current table

OID, Name, Access	Syntax	Description																								
1.3.6.1.4.1.181.2.1.2.1.2.1.8. <i>dsMRpUsrCurIndex</i>																										
<b><i>dsMRpUsrCurDM</i></b> read-only	Gauge	The number of Degraded Minutes encountered by a DS1/E1 interface in the current 15-minute interval.																								
1.3.6.1.4.1.181.2.1.2.1.2.1.9. <i>dsMRpUsrCurIndex</i>																										
<b><i>dsMRpUsrCurStatus</i></b> read-only	DisplayString (SIZE (0..10))	<p>The error conditions encountered by a DS1/E1 interface in the current 15-minute interval. The error conditions are signified by a single character. The possible values are:</p> <table> <thead> <tr> <th>VALUE</th><th>DESCRIPTION</th></tr> </thead> <tbody> <tr> <td>C</td><td>A CRC error has been detected on the received T1/E1 signal</td></tr> <tr> <td>B</td><td>A bipolar (line) violation has occurred on the received T1/E1 signal</td></tr> <tr> <td>L</td><td>A LOS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td></tr> <tr> <td>O</td><td>An OOF condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td></tr> <tr> <td>E</td><td>An EER condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td></tr> <tr> <td>A</td><td>An AIS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td></tr> <tr> <td>Y</td><td>A Yellow alarm has occurred on the received T1/E1 signal</td></tr> <tr> <td>S</td><td>A controlled slip has occurred on the received T1/E1 signal</td></tr> <tr> <td>@</td><td>There is an active alarm</td></tr> <tr> <td>T</td><td>There is a loop back, code generation, or BERT active</td></tr> <tr> <td>N</td><td>The unit was without power</td></tr> </tbody> </table>	VALUE	DESCRIPTION	C	A CRC error has been detected on the received T1/E1 signal	B	A bipolar (line) violation has occurred on the received T1/E1 signal	L	A LOS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	O	An OOF condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	E	An EER condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	A	An AIS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	Y	A Yellow alarm has occurred on the received T1/E1 signal	S	A controlled slip has occurred on the received T1/E1 signal	@	There is an active alarm	T	There is a loop back, code generation, or BERT active	N	The unit was without power
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## The user interval table

Table 4

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.1.3		
<b>dsMRpUsrIntvlTable</b> not-accessible	SEQUENCE OF DsMRpUsrIntvlEntry	The User Interval table. This table contains performance information for the past 24 hours, broken down by 15-minute intervals for the Network, Terminal, and Far End Network Interfaces.
1.3.6.1.4.1.181.2.1.2.1.3.1		
<b>dsMRpUsrIntvlEntry</b> not-accessible	INDEX <i>dsMRpUsrIntvlIndex</i> , <i>dsMRpUsrIntvlNum</i>	An entry in the User Interval table that consists of the following objects:  <i>dsMRpUsrIntvlIndex</i> , <i>dsMRpUsrIntvlNum</i> , <i>dsMRpUsrIntvlEE</i> , <i>dsMRpUsrIntvlES</i> , <i>dsMRpUsrIntvlBES</i> , <i>dsMRpUsrIntvlSES</i> , <i>dsMRpUsrIntvlUAS</i> , <i>dsMRpUsrIntvlCSS</i> , <i>dsMRpUsrIntvlDM</i> , <i>dsMRpUsrIntvlStatus</i>
1.3.6.1.4.1.181.2.1.2.1.3.1.1. <i>dsMRpUsrIntvlIndex.dsMRpUsrIntvlNum</i>		
<b>dsMRpUsrIntvlIndex</b> read-only	INTEGER 1, 2, 3	Network Interface Terminal Interface Far End Network Interface
		The index to the User Interval table.
1.3.6.1.4.1.181.2.1.2.1.3.1.2. <i>dsMRpUsrIntvlIndex.dsMRpUsrIntvlNum</i>		
<b>dsMRpUsrIntvlNum</b> read-only	INTEGER (1..96)	This is the interval number of the User Interval table. It will be the number of completed 15-minute intervals since the unit has been powered up. After 24 hours, this value remains constant at 96 intervals.
1.3.6.1.4.1.181.2.1.2.1.3.1.3. <i>dsMRpUsrIntvlIndex.dsMRpUsrIntvlNum</i>		
<b>dsMRpUsrIntvlEE</b> read-only	Gauge	The number of Event Errors encountered by a DS1/E1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.1.2.1.3.1.4. <i>dsMRpUsrIntvlIndex.dsMRpUsrIntvlNum</i>		
<b>dsMRpUsrIntvlES</b> read-only	Gauge	The number of Errored Seconds encountered by a DS1/E1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.1.2.1.3.1.5. <i>dsMRpUsrIntvlIndex.dsMRpUsrIntvlNum</i>		
<b>dsMRpUsrIntvlBES</b> read-only	Gauge	The number of Bursty Errored Seconds encountered by a DS1/E1 interface in one of the previous 96 15-minute intervals.

## The user interval table

Table 4

OID, Name, Access	Syntax	Description																								
1.3.6.1.4.1.181.2.1.2.1.3.1.6.dsMRpUsrIntvlIndex.dsMRpUsrIntvlNum																										
<b>dsMRpUsrIntvlSES</b> read-only	Gauge	The number of Severely Errored Seconds encountered by a DS1/E1 interface in one of the previous 96 15-minute intervals.																								
1.3.6.1.4.1.181.2.1.2.1.3.1.7.dsMRpUsrIntvlIndex.dsMRpUsrIntvlNum																										
<b>dsMRpUsrIntvlUAS</b> read-only	Gauge	The number of Unavailable Seconds encountered by a DS1/E1 interface in one of the previous 96 15-minute intervals.																								
1.3.6.1.4.1.181.2.1.2.1.3.1.8.dsMRpUsrIntvlIndex.dsMRpUsrIntvlNum																										
<b>dsMRpUsrIntvlCSS</b> read-only	Gauge	The number of Controlled Slip Seconds encountered by a DS1/E1 interface in one of the previous 96 15-minute intervals.																								
1.3.6.1.4.1.181.2.1.2.1.3.1.9.dsMRpUsrIntvlIndex.dsMRpUsrIntvlNum																										
<b>dsMRpUsrIntvlDM</b> read-only	Gauge	The number of Degraded Minutes encountered by a DS1/E1 interface in one of the previous 96 15-minute intervals.																								
1.3.6.1.4.1.181.2.1.2.1.3.1.10.dsMRpUsrIntvlIndex.dsMRpUsrIntvlNum																										
<b>dsMRpUsrIntvlStatus</b> read-only	DisplayString (SIZE (0..10))	<p>The error conditions encountered by a DS1/E1 interface in one of the previous 96 15-minute intervals. The error conditions are signified by a single character. The possible values are:</p> <table> <thead> <tr> <th>VALUE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>C</td> <td>A CRC error has been detected on the received T1/E1 signal</td> </tr> <tr> <td>B</td> <td>A bipolar (line) violation has occurred on the received T1/E1 signal</td> </tr> <tr> <td>L</td> <td>A LOS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td> </tr> <tr> <td>O</td> <td>An OOF condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td> </tr> <tr> <td>E</td> <td>An EER condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td> </tr> <tr> <td>A</td> <td>An AIS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td> </tr> <tr> <td>Y</td> <td>A Yellow alarm has occurred on the received T1/E1 signal</td> </tr> <tr> <td>S</td> <td>A controlled slip has occurred on the received T1/E1 signal</td> </tr> <tr> <td>@</td> <td>There is an active alarm</td> </tr> <tr> <td>T</td> <td>There is a loop back, code generation, or BERT active</td> </tr> <tr> <td>N</td> <td>The unit was without power</td> </tr> </tbody> </table>	VALUE	DESCRIPTION	C	A CRC error has been detected on the received T1/E1 signal	B	A bipolar (line) violation has occurred on the received T1/E1 signal	L	A LOS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	O	An OOF condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	E	An EER condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	A	An AIS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	Y	A Yellow alarm has occurred on the received T1/E1 signal	S	A controlled slip has occurred on the received T1/E1 signal	@	There is an active alarm	T	There is a loop back, code generation, or BERT active	N	The unit was without power
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## The user total table

**Table 5**

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.1.4		
<b><i>dsMRpUsrTotalTable</i></b> not-accessible	SEQUENCE OF <i>DsMRpUsrTotalEntry</i>	The User Total table. This table contains performance information for the past 24-hours, for the Network, Terminal, and Far End Network Interfaces. This is a rolling count. When the current 15-minute interval is up, the last entry in the interval table will be removed and the completed 15-minute interval added. At this point the Total table will be re-calculated.
1.3.6.1.4.1.181.2.1.2.1.4.1		
<b><i>dsMRpUsrTotalEntry</i></b> not-accessible	INDEX <i>dsMRpUsrTotalIndex</i>	An entry in the User Total table that consists of the following objects:  <i>dsMRpUsrTotalIndex</i> , <i>dsMRpUsrTotalEE</i> , <i>dsMRpUsrTotalES</i> , <i>dsMRpUsrTotalBES</i> , <i>dsMRpUsrTotalSES</i> , <i>dsMRpUsrTotalUAS</i> , <i>dsMRpUsrTotalCSS</i> , <i>dsMRpUsrTotalDM</i> , <i>dsMRpUsrTotalStatus</i>
1.3.6.1.4.1.181.2.1.2.1.4.1.1. <i>dsMRpUsrTotalIndex</i>		
<b><i>dsMRpUsrTotalIndex</i></b> read-only	INTEGER 1, 2, 3	Network Interface Terminal Interface Far End Network Interface  The index to the User Total table.
1.3.6.1.4.1.181.2.1.2.1.4.1.2. <i>dsMRpUsrTotalIndex</i>		
<b><i>dsMRpUsrTotalEE</i></b> read-only	Gauge	The number of Event Errors encountered by a DS1/E1 interface in the past 24 hours.
1.3.6.1.4.1.181.2.1.2.1.4.1.3. <i>dsMRpUsrTotalIndex</i>		
<b><i>dsMRpUsrTotalES</i></b> read-only	Gauge	The number of Errored Seconds encountered by a DS1/E1 interface in the past 24 hours.
1.3.6.1.4.1.181.2.1.2.1.4.1.4. <i>dsMRpUsrTotalIndex</i>		
<b><i>dsMRpUsrTotalBES</i></b> read-only	Gauge	The number of Bursty Errored Seconds encountered by a DS1/E1 interface in the past 24 hours.
1.3.6.1.4.1.181.2.1.2.1.4.1.5. <i>dsMRpUsrTotalIndex</i>		
<b><i>dsMRpUsrTotalSES</i></b> read-only	Gauge	The number of Severely Errored Seconds encountered by a DS1/E1 interface in the past 24 hours.
1.3.6.1.4.1.181.2.1.2.1.4.1.6. <i>dsMRpUsrTotalIndex</i>		
<b><i>dsMRpUsrTotalUAS</i></b> read-only	Gauge	The number of Unavailable Seconds encountered by a DS1/E1 interface in the past 24 hours.

**Table 5**

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>																								
1.3.6.1.4.1.181.2.1.2.1.4.1.7. <i>dsMRpUsrTotalIndex</i>																										
<b><i>dsMRpUsrTotalCSS</i></b> read-only	Gauge	The number of Controlled Slip Seconds encountered by a DS1/E1 interface in the past 24 hours.																								
1.3.6.1.4.1.181.2.1.2.1.4.1.8. <i>dsMRpUsrTotalIndex</i>																										
<b><i>dsMRpUsrTotalDM</i></b> read-only	Gauge	The number of Degraded Minutes encountered by a DS1/E1 interface in the past 24 hours.																								
1.3.6.1.4.1.181.2.1.2.1.4.1.9. <i>dsMRpUsrTotalIndex</i>																										
<b><i>dsMRpUsrTotalStatus</i></b> read-only	DisplayString (SIZE (0..10))	<p>The error conditions encountered by a DS1/E1 interface in the past 24 hours. The error conditions are signified by a single character. The possible values are:</p> <table> <thead> <tr> <th>VALUE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>C</td> <td>A CRC error has been detected on the received T1/E1 signal</td> </tr> <tr> <td>B</td> <td>A bipolar (line) violation has occurred on the received T1/E1 signal</td> </tr> <tr> <td>L</td> <td>A LOS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td> </tr> <tr> <td>O</td> <td>An OOF condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td> </tr> <tr> <td>E</td> <td>An EER condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td> </tr> <tr> <td>A</td> <td>An AIS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal</td> </tr> <tr> <td>Y</td> <td>A Yellow alarm has occurred on the received T1/E1 signal</td> </tr> <tr> <td>S</td> <td>A controlled slip has occurred on the received T1/E1 signal</td> </tr> <tr> <td>@</td> <td>There is an active alarm</td> </tr> <tr> <td>T</td> <td>There is a loop back, code generation, or BERT active</td> </tr> <tr> <td>N</td> <td>The unit was without power</td> </tr> </tbody> </table>	VALUE	DESCRIPTION	C	A CRC error has been detected on the received T1/E1 signal	B	A bipolar (line) violation has occurred on the received T1/E1 signal	L	A LOS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	O	An OOF condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	E	An EER condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	A	An AIS condition (but not necessarily an alarm) has occurred on the received T1/E1 signal	Y	A Yellow alarm has occurred on the received T1/E1 signal	S	A controlled slip has occurred on the received T1/E1 signal	@	There is an active alarm	T	There is a loop back, code generation, or BERT active	N	The unit was without power
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## The user day table

**Table 6**

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.1.5		
<b><i>dsMRpUsrDayTable</i></b> not-accessible	SEQUENCE OF <i>DsMRpUsrDayEntry</i>	After the unit has been powered up for 24 hours, the values from the User Total table are moved into the first slot in the User Day table. There are seven entries in the User Day table, so an entire week's history is maintained. The previous day is always in slot 1.
1.3.6.1.4.1.181.2.1.2.1.5.1		
<b><i>dsMRpUsrDayEntry</i></b> not-accessible	INDEX <i>dsMRpUsrDayIndex</i> , <i>dsMRpUsrDayNum</i>	An entry in the User Day table that consists of the following objects:  <i>dsMRpUsrDayIndex</i> , <i>dsMRpUsrDayNum</i> , <i>dsMRpUsrDayEE</i> , <i>dsMRpUsrDayES</i> , <i>dsMRpUsrDayBES</i> , <i>dsMRpUsrDaySES</i> , <i>dsMRpUsrDayUAS</i> , <i>dsMRpUsrDayCSS</i> , <i>dsMRpUsrDayDM</i> , <i>dsMRpUsrDayStatus</i>
1.3.6.1.4.1.181.2.1.2.1.5.1.1. <i>dsMRpUsrDayIndex.dsMRpUsrDayNum</i>		
<b><i>dsMRpUsrDayIndex</i></b> read-only	INTEGER 1, 2, 3	Network Interface Terminal Interface Far End Network Interface  The index to the User Day table.
1.3.6.1.4.1.181.2.1.2.1.5.1.2. <i>dsMRpUsrDayIndex.dsMRpUsrDayNum</i>		
<b><i>dsMRpUsrDayNum</i></b> read-only	INTEGER (1..7)	The User Day table day index. The valid values are 1 day to 7 days.
1.3.6.1.4.1.181.2.1.2.1.5.1.3. <i>dsMRpUsrDayIndex.dsMRpUsrDayNum</i>		
<b><i>dsMRpUsrDayEE</i></b> read-only	Gauge	The number of Event Errors encountered by a DS1/E1 interface in one of the previous days.
1.3.6.1.4.1.181.2.1.2.1.5.1.4. <i>dsMRpUsrDayIndex.dsMRpUsrDayNum</i>		
<b><i>dsMRpUsrDayES</i></b> read-only	Gauge	The number of Errored Seconds encountered by a DS1/E1 interface in one of the previous days.
1.3.6.1.4.1.181.2.1.2.1.5.1.5. <i>dsMRpUsrDayIndex.dsMRpUsrDayNum</i>		
<b><i>dsMRpUsrDayBES</i></b> read-only	Gauge	The number of Bursty Errrored Seconds encountered by a DS1/E1 interface in one of the previous days.
1.3.6.1.4.1.181.2.1.2.1.5.1.6. <i>dsMRpUsrDayIndex.dsMRpUsrDayNum</i>		
<b><i>dsMRpUsrDaySES</i></b> read-only	Gauge	The number of Severely Errrored Seconds encountered by a DS1/E1 interface in one of the previous days.

**Table 6**

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.1.2.1.5.1.7.dsMRpUsrDayIndex.dsMRpUsrDayNum		
<b>dsMRpUsrDayUAS</b> read-only	Gauge	The number of Unavailable Seconds encountered by a DS1/E1 interface in one of the previous days.
1.3.6.1.4.1.181.2.1.2.1.5.1.8.dsMRpUsrDayIndex.dsMRpUsrDayNum		
<b>dsMRpUsrDayCSS</b> read-only	Gauge	The number of Controlled Slip Seconds encountered by a DS1/E1 interface in one of the previous days.
1.3.6.1.4.1.181.2.1.2.1.5.1.9.dsMRpUsrDayIndex.dsMRpUsrDayNum		
<b>dsMRpUsrDayDM</b> read-only	Gauge	The number of Degraded Minutes encountered by a DS1/E1 interface in one of the previous days.
1.3.6.1.4.1.181.2.1.2.1.5.1.10.dsMRpUsrDayIndex.dsMRpUsrDayNum		
<b>dsMRpUsrDayStatus</b> read-only	DisplayString (SIZE (0..10))	The error conditions encountered by a DS1/E1 interface in one of the previous days. The error conditions are signified by a single character. The possible values are:
	VALUE	DESCRIPTION
	C	A CRC error has been detected on the received T1/E1 signal
	B	A bipolar (line) violation has occurred on the received T1/E1 signal
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	S	A controlled slip has occurred on the received T1/E1 signal
	@	There is an active alarm
	T	There is a loop back, code generation, or BERT active
	N	The unit was without power

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## The carrier reports group

Table 7

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.2.1.0  <b><i>dsMRpCarCntSecs</i></b> read-only	INTEGER (0..899)	The number of seconds that have elapsed in the current interval.
1.3.6.1.4.1.181.2.1.2.2.2.0  <b><i>dsMRpCarCnt15Mins</i></b> read-only	INTEGER (0..96)	The number of 15-minute intervals that have elapsed in the current 24 hours.

## The carrier current table

**Table 8**

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.2.3.1.0		
<b><i>dsMRpCarCurEE</i></b> read-only	Gauge	The number of Event Errors encountered by the Network Interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.1.2.2.3.2.0		
<b><i>dsMRpCarCurES</i></b> read-only	Gauge	The number of Errored Seconds encountered by the Network Interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.1.2.2.3.3.0		
<b><i>dsMRpCarCurBES</i></b> read-only	Gauge	The number of Bursty Errored Seconds encountered by the Network Interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.1.2.2.3.4.0		
<b><i>dsMRpCarCurSES</i></b> read-only	Gauge	The number of Severely Errored Seconds encountered by the Network Interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.1.2.2.3.5.0		
<b><i>dsMRpCarCurUAS</i></b> read-only	Gauge	The number of Unavailable Seconds encountered by the Network Interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.1.2.2.3.6.0		
<b><i>dsMRpCarCurCSS</i></b> read-only	Gauge	The number of Controlled Slip Seconds encountered by the Network Interface in the current 15-minute interval.
1.3.6.1.4.1.181.2.1.2.2.3.7.0		
<b><i>dsMRpCarCurLOFC</i></b> read-only	Gauge	The Loss of Frame Count for the Network Interface in the current 15-minute interval.

## The carrier interval table

**Table 9**

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.2.4		
<b><i>dsMRpCarIntvlTable</i></b> not-accessible	SEQUENCE OF <i>DsMRpCarIntvlEntry</i>	This is the Carrier Interval table. This table contains performance information about the Network Interface.
1.3.6.1.4.1.181.2.1.2.2.4.1		
<b><i>dsMRpCarIntvlEntry</i></b> not-accessible	INDEX <i>dsMRpCarIntvlNum</i>	An entry in the Carrier Interval table that consists of the following objects:  <i>dsMRpCarIntvlNum,</i> <i>dsMRpCarIntvlEE,</i> <i>dsMRpCarIntvlES,</i> <i>dsMRpCarIntvlBES,</i> <i>dsMRpCarIntvlSES,</i> <i>dsMRpCarIntvlUAS,</i> <i>dsMRpCarIntvlCSS,</i> <i>dsMRpCarIntvlLOFC</i>
1.3.6.1.4.1.181.2.1.2.2.4.1.1. <i>dsMRpCarIntvlNum</i>		
<b><i>dsMRpCarIntvlNum</i></b> read-only	INTEGER (1..96)	The number of the 15-minute interval (1-96) from the previous 24-hour period. 1 is the most recent.
1.3.6.1.4.1.181.2.1.2.2.4.1.2. <i>dsMRpCarIntvlNum</i>		
<b><i>dsMRpCarIntvlEE</i></b> read-only	Gauge	The number of Event Errors encountered by the Network Interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.1.2.2.4.1.3. <i>dsMRpCarIntvlNum</i>		
<b><i>dsMRpCarIntvlES</i></b> read-only	Gauge	The number of Errored Seconds encountered by the Network Interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.1.2.2.4.1.4. <i>dsMRpCarIntvlNum</i>		
<b><i>dsMRpCarIntvlBES</i></b> read-only	Gauge	The number of Bursty Errrored Seconds encountered by the Network Interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.1.2.2.4.1.5. <i>dsMRpCarIntvlNum</i>		
<b><i>dsMRpCarIntvlSES</i></b> read-only	Gauge	The number of Severely Errrored Seconds encountered by the Network Interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.1.2.2.4.1.6. <i>dsMRpCarIntvlNum</i>		
<b><i>dsMRpCarIntvlUAS</i></b> read-only	Gauge	The number of Unavailable Seconds encountered by the Network Interface in one of the previous 96 15-minute intervals.
1.3.6.1.4.1.181.2.1.2.2.4.1.7. <i>dsMRpCarIntvlNum</i>		
<b><i>dsMRpCarIntvlCSS</i></b> read-only	Gauge	The number of Controlled Slip Seconds encountered by the Network Interface in one of the previous 96 15-minute intervals.

**Table 9**

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.2.4.1.8. <i>dsMRpCarIntvlNum</i>		
<b><i>dsMRpCarIntvlLOFC</i></b> read-only	Gauge	The Loss of Frame Count fo the Network Interface for one of the previous 96 15-minute intervals.

## The carrier total table

**Table 10**

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.2.5.1.0		
<b><i>dsMRpCarTotalEE</i></b> read-only	Gauge	The Carrier Total table. This table contains performance information about the Network Interface for the past 24 hours.
1.3.6.1.4.1.181.2.1.2.2.5.2.0		
<b><i>dsMRpCarTotalES</i></b> read-only	Gauge	The number of Errored Seconds encountered by the Network Interface in the past 24 hours.
1.3.6.1.4.1.181.2.1.2.2.5.3.0		
<b><i>dsMRpCarTotalBES</i></b> read-only	Gauge	The number of Bursty Errrored Seconds encountered by the Network Interface in the past 24 hours.
1.3.6.1.4.1.181.2.1.2.2.5.4.0		
<b><i>dsMRpCarTotalSES</i></b> read-only	Gauge	The number of Severely Errrored Seconds encountered by the Network Interface in the past 24 hours.
1.3.6.1.4.1.181.2.1.2.2.5.5.0		
<b><i>dsMRpCarTotalUAS</i></b> read-only	Gauge	The number of Unavailable Seconds encountered by the Network Interface in the past 24 hours.
1.3.6.1.4.1.181.2.1.2.2.5.6.0		
<b><i>dsMRpCarTotalCSS</i></b> read-only	Gauge	The number of Controlled Slip Seconds encountered by the Network Interface in the past 24 hours.
1.3.6.1.4.1.181.2.1.2.2.5.7.0		
<b><i>dsMRpCarTotalLOFC</i></b> read-only	Gauge	The Loss of Frame Count for the Network Interface for one of the previous 96 15-minute intervals.

# The statistics report group

## The statistics report table

Table 11

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.3.1		
<b>dsMRpStTable</b> not-accessible	SEQUENCE OF DsMRpStEntry	The Statistics Report table. This table consists of statistical error counts of various DS1/E1 line conditions. These counts are maintained between power-cycles.
1.3.6.1.4.1.181.2.1.2.3.1.1		
<b>dsMRpStEntry</b> not-accessible	INDEX <i>dsMRpStIndex</i>	An entry in the Statistics Report table that consists of the following objects:  <i>dsMRpStIndex,</i> <i>dsMRpStEsfErrors,</i> <i>dsMRpStCrcErrors,</i> <i>dsMRpStOutOfErrors,</i> <i>dsMRpStFrameBitErrors,</i> <i>dsMRpStBPs,</i> <i>dsMRpStControlledSlips,</i> <i>dsMRpStYellowEvents,</i> <i>dsMRpStAISEvents,</i> <i>dsMRpStLOFEvents,</i> <i>dsMRpStLOSEvents,</i> <i>dsMRpStLOPowerEvents,</i> <i>dsMRpStFarEndBlkErrors,</i> <i>dsMRpStRemFrameAlmEvts,</i> <i>dsMRpStRemMFrameAlmEvts,</i> <i>dsMRpStLOTS16MFrameEvts,</i> <i>dsMRpStZeroCounters</i>
1.3.6.1.4.1.181.2.1.2.3.1.1.1. <i>dsMRpStIndex</i>		
<b>dsMRpStIndex</b> read-only	INTEGER 1, 2, 3	Network Interface Terminal Interface Far End Network Interface
		The index to the Statistics table.
1.3.6.1.4.1.181.2.1.2.3.1.1.2. <i>dsMRpStIndex</i>		
<b>dsMRpStEsfErrors</b> read-only	Counter	The total number of Error Free Seconds since the counters have last been cleared.
1.3.6.1.4.1.181.2.1.2.3.1.1.3. <i>dsMRpStIndex</i>		
<b>dsMRpStCrcErrors</b> read-only	Counter	The total number of CRC errors since the counters have last been cleared.
1.3.6.1.4.1.181.2.1.2.3.1.1.4. <i>dsMRpStIndex</i>		
<b>dsMRpStOutOfErrors</b> read-only	Counter	The total number of Out Of Frame errors since the counters have last been cleared.

## The statistics report table

Table 11

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.3.1.1.5.dsMRpStIndex		
<b>dsMRpStFrameBitErrors</b> read-only	Counter	The total number of Frame Bit errors since the counters have last been cleared.
1.3.6.1.4.1.181.2.1.2.3.1.1.6.dsMRpStIndex		
<b>dsMRpStBPs</b> read-only	Counter	The total number of Bipolar Violations since the counters have last been cleared.
1.3.6.1.4.1.181.2.1.2.3.1.1.7.dsMRpStIndex		
<b>dsMRpStControlledSlips</b> read-only	Counter	The total number of Controlled Slips since the counters have last been cleared.
1.3.6.1.4.1.181.2.1.2.3.1.1.8.dsMRpStIndex		
<b>dsMRpStYellowEvents</b> read-only	Counter	The total number of Yellow Events since the counters have last been cleared.
1.3.6.1.4.1.181.2.1.2.3.1.1.9.dsMRpStIndex		
<b>dsMRpStAISignals</b> read-only	Counter	The total number of Alarm Indication Signals since the counters have last been cleared.
1.3.6.1.4.1.181.2.1.2.3.1.1.10.dsMRpStIndex		
<b>dsMRpStLOFEvents</b> read-only	Counter	The total number of Loss of Frame events since the counters have last been cleared.
1.3.6.1.4.1.181.2.1.2.3.1.1.11.dsMRpStIndex		
<b>dsMRpStLOSEvents</b> read-only	Counter	The total number of Loss of Signal events since the counters have last been cleared.
1.3.6.1.4.1.181.2.1.2.3.1.1.12.dsMRpStIndex		
<b>dsMRpStLOPowerEvents</b> read-only	Counter	The total number of Loss of Power events since the counters have last been cleared.
1.3.6.1.4.1.181.2.1.2.3.1.1.13.dsMRpStIndex		
<b>dsMRpStFarEndBlkErrors</b> read-only	Counter	The total number of Far End Block Errors since the counters were last cleared.
1.3.6.1.4.1.181.2.1.2.3.1.1.14.dsMRpStIndex		
<b>dsMRpStRemFrameAlmEvts</b> read-only	Counter	The total number of Remote Frame Alarm events since the counters were last cleared.
1.3.6.1.4.1.181.2.1.2.3.1.1.15.dsMRpStIndex		
<b>dsMRpStRemMFrameAlmEvts</b> read-only	Counter	The total number of Remote MultiFrame Alarm events since the counters were last cleared.
1.3.6.1.4.1.181.2.1.2.3.1.1.16.dsMRpStIndex		
<b>dsMRpStLOTS16MFrameEvts</b> read-only	Counter	The total number of Loss of TS16MultiFrame events since the counters have been cleared.

## The statistics report table

Table 11

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.3.1.1.17. <i>dsMRpStIndex</i>		
<b><i>dsMRpStZeroCounters</i></b> read-write	INTEGER <i>rpStZeroCountersIdle(1),</i> <i>rpStZero-</i> <i>CountersStart(2)</i>	This object will clear the Statistics table counters when it is set to <i>rpStZeroCounterStart(2)</i> . Once the counters have been cleared, it will return to its normal state of <i>rpStZeroCountersIdle(1)</i> .

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## Pagination settings

Table 12

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.4.1.0  <b>dsMPIBreak</b> read-write	INTEGER <i>rpPILineFeed(1), rpPIMorePrompt(2)</i>	Use linefeeds for page breaks Use ‘more’ prompts for page breaks  This object determines if the user interface uses page breaks or ‘more’ prompts when displaying information which is longer than the defined page length (e.g., output from UNLR or SCV). A page length of 0 will disable both page breaks and ‘more’ prompts.
1.3.6.1.4.1.181.2.1.2.4.2.0  <b>dsMPILen</b> read-write	INTEGER (0..70)	The length of a ‘page’ of information. When the set number of lines have been displayed, a ‘more’ prompt or line-feed will be inserted (defined by <i>dsMPIBreak</i> ). A page length of 0 causes output to scroll continuously without page breaks or ‘more’ prompts.

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## The alarm history report table

Table 13

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.5		
<b>dsMRpAhrTable</b> not-accessible	SEQUENCE OF DsMRpAhrEntry	This is the Alarm History table. It contains the text messages of the last 20 alarms.
1.3.6.1.4.1.181.2.1.2.5.1		
<b>dsMRpAhrEntry</b> not-accessible	INDEX <i>dsMRpAhrIndex</i>	An entry in the Alarm History table that consists of the following objects:  <i>dsMRpAhrIndex</i> , <i>dsMRpAhrStr</i>
1.3.6.1.4.1.181.2.1.2.5.1.1. <i>dsMRpAhrIndex</i>		
<b>dsMRpAhrIndex</b> read-only	INTEGER (1..20)	The Alarm History table index. Index 1 is the most recent alarm.
1.3.6.1.4.1.181.2.1.2.5.1.2. <i>dsMRpAhrIndex</i>		
<b>dsMRpAhrStr</b> read-only	DisplayString (SIZE (0..80))	The alarm message in USER format.

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## Error thresholds

Table 14

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.2.6.0		
<b><i>dsMRpBes</i></b> read-write	INTEGER (2..63999)	The error threshold for Bursty Errored Seconds. E1 only.
1.3.6.1.4.1.181.2.1.2.7.0		
<b><i>dsMRpSes</i></b> read-write	INTEGER (3..64000)	The threshold for Severely Errored Seconds. E1 only.
1.3.6.1.4.1.181.2.1.2.8.0		
<b><i>dsMRpDm</i></b> read-write	INTEGER (1..64000)	The threshold for Degraded Minutes. E1 only.

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## The local maintenance group

Table 15

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.3.1.0		
<b><i>dsMLmLoopback</i></b> read-write	INTEGER <i>lmLbkNone(1),</i> <i>lmLbkLine(2),</i> <i>lmLbkPayload(3),</i> <i>lmLbkLocal(4),</i> <i>lmLbkTiTest(5),</i> <i>lmLbkDp1(6),</i> <i>lmLbkDp2(7),</i> <i>lmLbkDt1(8),</i> <i>lmLbkDt2(9)</i>	No loopback is set Line loopback is set Payload loopback is set Local loopback is set TI looback is set Data port 1 loopback is set Data port 2 loopback is set Data terminal loopback on data port 1 is set Data terminal loopback on data port 2 is set  This is the type of loopback that is currently active.
1.3.6.1.4.1.181.2.1.3.2.0		
<b><i>dsMLmSelfTestState</i></b> read-write	INTEGER <i>lmSelfTestIdle(1),</i> <i>lmSelfTestStart(2)</i>	Normal state Set to this value to start a self test operation
1.3.6.1.4.1.181.2.1.3.3.0		
<b><i>dsMLmSelfTestResults</i></b> read-only	DisplayString (SIZE (0..255))	The results of the last self test operation.

# The remote maintenance group

Table 16

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.4.1.0		
<b><i>dsMRmLbkCode</i></b> read-write	INTEGER <i>rmRNone(1),</i> <i>rmRst1(2),</i> <i>rmRLIne(3),</i> <i>rmRPayload(4),</i> <i>rmRDp1(5),</i> <i>rmRDp2(6),</i> <i>rmRDp3(7),</i> <i>rmRDp4(8)</i>	No loopback is set A remote loopback reset code is currently being sent A remote Line loopback is set A remote Payload loopback is set A remote Data Port 1 loopback is set A remote Data Port 2 loopback is set A remote Data Port 3 loopback is set A remote Data Port 4 loopback is set  The type of remote loopback that is currently set.
1.3.6.1.4.1.181.2.1.4.2.0		
<b><i>dsMRmTestCode</i></b> read-write	INTEGER <i>rmTestNone(1),</i> <i>rmTestQrs(2),</i> <i>rmTest324(3),</i> <i>rmTestOnes(4),</i> <i>rmTestZeros(5),</i> <i>rmTest511Dp1(6),</i> <i>rmTest511Dp2(7),</i> <i>rmTest511Dp3(8),</i> <i>rmTest511Dp4(9),</i> <i>rmTest2047Dp1(10),</i> <i>rmTest2047Dp2(11),</i> <i>rrmTest2047Dp3(12),</i> <i>rmTest2047Dp4(13),</i> <i>mTest2-23(14),</i> <i>rmTest2-15(15),</i>	No test code is being sent QRS is being sent 3-in-24 is being sent All ones is being sent All zeros is being sent 511 is being sent out data port 1 511 is being sent out data port 2 511 is being sent out data port 3 511 is being sent out data port 4 2047 is being sent out data port 1 2047 is being sent out data port 2 2047 is being sent out data port 3 2047 is being sent out data port 4 2-in-23 is being sent 2-in-15 is being sent  The type of remote test code that is currently being sent.
1.3.6.1.4.1.181.2.1.4.3.0		
<b><i>dsMRmBertState</i></b> read-only	INTEGER <i>rmBertIdle(1),</i> <i>rmBertOtherStart(2),</i> <i>rmBertSearching(3),</i> <i>rmBertFound(4)</i>	No BERT test is active BERT was started from the control port, front panel, or Telnet BERT was started from the agent and has not yet detected the code BERT was started from the agent and has detected the code  The current BERT state.

**Table 16**


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1.3.6.1.4.1.181.2.1.4.4.0	<b><i>dsMRmBertCode</i></b> read-write	INTEGER  <i>rmBertNone(1),</i> <i>rmBertQrs(2),</i> <i>rmBert324(3),</i> <i>rmBertOnes(4),</i> <i>rmBertZeros(5),</i> <i>rmBert511Dp1(6),</i> <i>rmBert511Dp2(7),</i> <i>rmBert511Dp3(8),</i> <i>rmBert511Dp4(9),</i> <i>rmBert2047Dp1(10),</i> <i>rmBert2047Dp2(11),</i> <i>rmBert2047Dp3(12),</i> <i>rmBert2047Dp4(13),</i> <i>rmTest2-23(14),</i> <i>rmTest2-15(15)</i>	No BERT test is active  BERT for QRS  BERT for 3-in-24  BERT for all ones  BERT for all zeros  BERT for 511 on data port 1  BERT for 511 on data port 2  BERT for 511 on data port 3  BERT for 511 on data port 4  BERT for 2047 on data port 1  BERT for 2047 on data port 2  BERT for 2047 on data port 3  BERT for 2047 on data port 4  BERT for 2-in-23  BERT for 2-in-15	This object controls the activation of BERT tests.
1.3.6.1.4.1.181.2.1.4.5.0	<b><i>dsMRmBertTestSecs</i></b> read-only	INTEGER (0..2147483647)	The number of seconds the requested test code has been detected since the start of the BERT.	
1.3.6.1.4.1.181.2.1.4.6.0	<b><i>dsMRmBertBitErrors</i></b> read-only	INTEGER (0..2147483647)	The number of bit errors detected since the start of the BERT.	
1.3.6.1.4.1.181.2.1.4.7.0	<b><i>dsMRmBertErrdSecs</i></b> read-only	INTEGER (0..2147483647)	The number of errored seconds detected since the start of the BERT.	
1.3.6.1.4.1.181.2.1.4.8.0	<b><i>dsMRmBertTotalErrors</i></b> read-only	INTEGER (0..2147483647)	The number of total errors detected since the start of the BERT.	
1.3.6.1.4.1.181.2.1.4.9.0	<b><i>dsMRmBertReSync</i></b> read-only	INTEGER (0..2147483647)	The number of times BERT has lost and re-acquired the pattern.	

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# The alarm configuration group

Table 17

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.5.1.0		
<b><i>dsMAcAlmMsg</i></b> read-write	INTEGER <i>acAlmMsgEnable(1), acAlmMsgDisable(2)</i>	Enable alarm messages Disable alarm messages  This object controls the displaying/sending of alarm messages.
1.3.6.1.4.1.181.2.1.5.2.0		
<b><i>dsMAcAlmFormat</i></b> read-write	INTEGER <i>acAlmFormatUser(1), acAlmFormatSNMP(2)</i>	ASCII alarm strings will be sent SNMP traps will be sent  This object determines what format alarm messages are sent in.
1.3.6.1.4.1.181.2.1.5.3.0		
<b><i>dsMAcYelAlm</i></b> read-write	INTEGER <i>acYelAlmEnable(1), acYelAlmDisable(2)</i>	Send alarm message on incoming Yellow Alarm Don't send alarm message on incoming Yellow Alarm  This object determines if incoming Yellow Alarm will cause an alarm message to be sent. The variable applies to both the Network and Terminal interfaces.
1.3.6.1.4.1.181.2.1.5.4.0		
<b><i>dsMAcDeact</i></b> read-write	INTEGER (0..15)	This object controls the number of seconds an alarm condition must remain clear before the unit declares it cleared. The range is from 0 to 15 seconds.
1.3.6.1.4.1.181.2.1.5.5.0		
<b><i>dsMAcEst</i></b> read-write	INTEGER (0..900)	This object determines the threshold of errored seconds that triggers an Excessive Error Rate (EER) alarm. Setting this object to zero disables errored seconds causing an EER alarm.
1.3.6.1.4.1.181.2.1.5.6.0		
<b><i>dsMAcUst</i></b> read-write	INTEGER (0..900)	This object determines the threshold of unavailable seconds that triggers an Excessive Error Rate (EER) alarm. Setting this object to zero disables unavailable seconds causing an EER alarm.

**Table 17**

1.3.6.1.4.1.181.2.1.5.7.0	<b>dsMAcSt</b> read-write	INTEGER <i>acSt15(1), acSt60(2)</i>	15-minute sliding window 60-minute sliding window	This object determines the window used to calculate whether an Excessive Error Rate (EER) alarm should be generated from errored seconds or unavailable seconds.
1.3.6.1.4.1.181.2.1.5.8.0				
	<b>dsMAcBerAlm</b> read-write	INTEGER <i>acBerAlmEnable(1), acBerAlmDisable(2)</i>	Enable sending BER alarms Disable sending BER alarms	This object controls the sending of a Bit Error Rate (BER) alarm. E1 only.
1.3.6.1.4.1.181.2.1.5.9.0				
	<b>dsMAcRfaAlm</b> read-write	INTEGER <i>acRfaAlmEnable(1), acRfaAlmDisable(2)</i>	Enable sending RFA alarms Disable sending RFA alarms	This object controls the sending of a Remote Frame Alarm (RFA). E1 only.
1.3.6.1.4.1.181.2.1.5.10.0				
	<b>dsMAcAisAlm</b> read-write	INTEGER <i>acAisAlmEnable(1), acAisAlmDisable(2)</i>	Enable sending AIS alarms Disable sending AIS alarms	This object controls the sending of Alarm Indication Signal (AIS) alarms. E1 only.

## The control port configuration group

Table 18

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.6.1.0		
<b><i>dsMCcEcho</i></b> read-write	INTEGER <i>ccEchoEnable(1), ccEchoDisable(2)</i>	Enable control port echo Disable control port echo  This object controls character echo on the control port.
1.3.6.1.4.1.181.2.1.6.2.0		
<b><i>dsMCcControlPort</i></b> read-write	INTEGER <i>ccDce(1), ccDte(2)</i>	The control port is the DCE port The control port is the DTE port  This object determines whether the control port is the DCE or DTE port.
1.3.6.1.4.1.181.2.1.6.3.0		
<b><i>dsMCcBaud</i></b> read-only	INTEGER <i>cc1200(1), cc2400(2), cc4800(3), cc9600(4), cc19200(5), cc38400(6)</i>	1200 baud 2400 baud 4800 baud 9600 baud 19200 baud 38400 baud  The baud rate of the control port.
1.3.6.1.4.1.181.2.1.6.4.0		
<b><i>dsMCcParity</i></b> read-only	INTEGER <i>ccNone(1), ccEven(2), ccOdd(3)</i>	No parity Even parity Odd parity  The parity of the control port.
1.3.6.1.4.1.181.2.1.6.5.0		
<b><i>dsMCcDataBits</i></b> read-only	INTEGER <i>cc7Bit(1), cc8Bit(2)</i>	7 data bits 8 data bits  The number of data bits for the control port.
1.3.6.1.4.1.181.2.1.6.6.0		
<b><i>dsMCcStopBits</i></b> read-only	INTEGER <i>cc1Bit(1), cc2Bit(2)</i>	1 stop bit 2 stop bits  The number of stop bits for the control port.

**Table 18**

1.3.6.1.4.1.181.2.1.6.7.0

<b><i>dsMCcDceIn</i></b>	INTEGER
read-only	
	<i>ccBothOff(1),</i>
	<i>ccRtsOnDtrOff(2),</i>
	<i>ccRtsOffDtrOn(3),</i>
	<i>ccBothOn(4)</i>
	RTS off, DTR off
	RTS on, DTR off
	RTS off, DTR on
	RTS on, DTR on
	The input status of the DCE signals RTS and DTR.

1.3.6.1.4.1.181.2.1.6.8.0

<b><i>dsMCcDteln</i></b>	INTEGER
read-only	
	<i>ccBothOff(1),</i>
	<i>ccCtsOnDcdOff(2),</i>
	<i>ccCtsOffDcdOn(3),</i>
	<i>ccBothOn(4)</i>
	CTS off, DCD off
	CTS on, DCD off
	CTS off, DCD on
	CTS on, DCD on
	The input status of the DTE signals CTS and DCD.

# The data port configuration group

## The data port configuration table

Table 19

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.7.1		
<b>dsMDcTable</b> not-accessible	SEQUENCE OF DsMDcEntry	The Data Port Configuration table. This table contains information on the configuration of each of the unit's data ports.
1.3.6.1.4.1.181.2.1.7.1.1		
<b>dsMDcEntry</b> not-accessible	INDEX <i>dsMDcIndex</i>	An entry in the Data Port Configuration table that consists of the following objects:  <i>dsMDcIndex,</i> <i>dsMDcDataInvert,</i> <i>dsMDcInterface,</i> <i>dsMDcClockSource,</i> <i>dsMDcXmtClkInvert,</i> <i>dsMDcRcvClkInvert,</i> <i>dsMDcIdleChar,</i> <i>dsMDcLOSInput</i>
1.3.6.1.4.1.181.2.1.7.1.1.1. <i>dsMDcIndex</i>		
<b>dsMDcIndex</b> read-only	INTEGER (1..4)	The index to the Data Port Configuration table. The possible values are 1 through 4.
1.3.6.1.4.1.181.2.1.7.1.1.2. <i>dsMDcIndex</i>		
<b>dsMDcDataInvert</b> read-write	INTEGER <i>dcDataInvertEnable(1), dcDataInvertDisable(2)</i>	Invert the data port signal Don't invert the data port signal  The data inversion of the data port.
1.3.6.1.4.1.181.2.1.7.1.1.3. <i>dsMDcIndex</i>		
<b>dsMDcInterface</b> read-write	INTEGER <i>dcV35Interface(1), dcEia530Interface(2)</i>	V.35 EIA-530  The type of electrical interface the data port is using.
1.3.6.1.4.1.181.2.1.7.1.1.4. <i>dsMDcIndex</i>		
<b>dsMDcClockSource</b> read-write	INTEGER <i>dcInternalClock(1), dcExternalClock(2)</i>	Use the internal clock Use the external clock  The clock source for the data port.
1.3.6.1.4.1.181.2.1.7.1.1.5. <i>dsMDcIndex</i>		
<b>dsMDcXmtClkInvert</b> read-write	INTEGER <i>dcXClkInvertEnable(1), dcXClkInvertDisable(2)</i>	Invert the transmit clock signal Don't invert the transmit clock signal  The inversion status of the transmit clock signal for the data port.

## The data port configuration table

Table 19

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.7.1.1.6. <i>dsMDcIndex</i>		
<b><i>dsMDcRcvClkInvert</i></b> read-write	INTEGER <i>dcRClkInvertEnable(1)</i> , Invert the received clock signal <i>dcRClkInvertDisable(2)</i> Don't invert the received clock signal	The inversion status of the received clock signal for the data port.
1.3.6.1.4.1.181.2.1.7.1.1.7. <i>dsMDcIndex</i>		
<b><i>dsMDcIdleChar</i></b> read-write	INTEGER <i>dc7eIdleChar(1)</i> , The idle character is hex 7E <i>dc7fIdleChar(2)</i> , The idle character is hex 7F <i>dcffIdleChar(3)</i> , The idle character is hex FF	The idle character to use for the data port.
1.3.6.1.4.1.181.2.1.7.1.1.8. <i>dsMDcIndex</i>		
<b><i>dsMDcLOSInput</i></b> read-write	INTEGER <i>dcLosNone(1)</i> , Data port LOS is disabled <i>dcLosRTS(2)</i> , LOS is declared when RTS is lost <i>dcLosDTR(3)</i> , LOS is declared when DTR is lost <i>dcLosBoth(4)</i> , LOS is declared when both RTS and DTR are lost	The combination of RTS and DTR that will cause a data port Loss of Signal alarm.

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## The fractional T1 configuration group

Table 20

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.8.1.0		
<b><i>dsMFcLoadXcute</i></b> read-write	INTEGER <i>fcLoadXcuteIdle(1),</i> <i>fcLoadXcuteStartA(2),</i> <i>fcLoadXcuteStartB(3)</i>	normal state Load and execute table A Load and execute table B  The Fractional T1 table that is active.

## The fractional T1 configuration table

**Table 21**

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.8.2		
<b>dsMFcTable</b> not-accessible	SEQUENCE OF dsMFcEntry	This is the DS1/E1 Fractional table. This table consists of configuration information about DS1/E1 fractional services.
1.3.6.1.4.1.181.2.1.8.2.1		
<b>dsMFcEntry</b> not-accessible	INDEX <i>dsMFcTableIndex</i> , <i>dsMFcChanIndex</i>	An entry in the DS1/E1 Fractional table that consists of the following objects:  <i>dsMFcTableIndex</i> , <i>dsMFcChanIndex</i> , <i>dsMFcChanMap</i>
1.3.6.1.4.1.181.2.1.8.2.1.1. <i>dsMFcTableIndex.dsMFcChanIndex</i>		
<b>dsMFcTableIndex</b> read-only	INTEGER 1, 2, 3	Stored configuration A Stored configuration B Currently executing fractional table  This is the index into the Fractional table.
1.3.6.1.4.1.181.2.1.8.2.1.2. <i>dsMFcTableIndex.dsMFcChanIndex</i>		
<b>dsMFcChanIndex</b> read-only	INTEGER (1..31)	This is the index of the fractional channel. DS1 has 24 channels and E1 has 32.
1.3.6.1.4.1.181.2.1.8.2.1.3. <i>dsMFcTableIndex.dsMFcChanIndex</i>		
<b>dsMFcChanMap</b> read-write	INTEGER <i>fcChanIdle</i> (1), <i>fcChanTiData</i> (2), <i>fcChanTiVoice</i> (3), <i>fcChan56Dp1</i> (4), <i>fcChan64Dp1</i> (5), <i>fcChan56Dp2</i> (6), <i>fcChan64Dp2</i> (7), <i>fcChan56Dp1</i> (8), <i>fcChan64Dp1</i> (9), <i>fcChan56Dp2</i> (10), <i>fcChan64Dp2</i> (11), <i>ffcChanUnav</i> (12)	The channel is idle The channel carries data and is mapped to a TI channel The channel carries voice and is mapped to a TI channel The channel is set for 56K and is mapped to data port 1 The channel is set for 64K and is mapped to data port 1 The channel is set for 56K and is mapped to data port 2 The channel is set for 64K and is mapped to data port 2 The channel is set for 56K and is mapped to data port 3 The channel is set for 64K and is mapped to data port 3 The channel is set for 56K and is mapped to data port 4 The channel is set for 64K and is mapped to data port 4 The channel is unavailable  The destination and data rate of the channel.
1.3.6.1.4.1.181.2.1.8.3.0		
<b>dsMFcMap16</b> read-write	INTEGER <i>fcMap16Used</i> (1), <i>fcMap16Unused</i> (2)	Channel 16 cannot be used for user payload data Channel 16 is available for user payload data  This object determines if channel 16 is available for user payload data. This is only possible if the unit is configured for Common Channel Signalling. E1 only.

## The management configuration group

Table 22

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.9.1.0		
<b><i>dsMMCagent</i></b> read-write	INTEGER <i>mcAgentEnable(1), mcAgentDisable(2)</i>	The SNMP agent is enabled The SNMP agent is disabled The management access port(s) for Telnet and SNMP.
1.3.6.1.4.1.181.2.1.9.2.0		
<b><i>dsMMCTrapCommStr</i></b> read-write	DisplayString (SIZE (1..15))	The SNMP trap community string. For security reasons, this variable is not available.
1.3.6.1.4.1.181.2.1.9.3.0		
<b><i>dsMMCReadCommStr</i></b> read-write	DisplayString (SIZE (1..15))	The SNMP read community string. For security reasons, this variable is not available.
1.3.6.1.4.1.181.2.1.9.4.0		
<b><i>dsMMCWriteCommStr</i></b> read-write	DisplayString (SIZE (1..15))	The SNMP write community string. For security reasons, this variable is not available.
1.3.6.1.4.1.181.2.1.9.5.0		
<b><i>dsMMCTelnetPsswd</i></b> read-write	DisplayString (SIZE (0..15))	The Telnet password. For security reasons, this variable is not available.
1.3.6.1.4.1.181.2.1.9.6.0		
<b><i>dsMMCSourceScreen</i></b> read-write	INTEGER <i>mcIpScreen(1), mcNoScreen(2)</i>	The screening security is enabled The screening security is disabled The status of the IP source address screening security.
1.3.6.1.4.1.181.2.1.9.7.0		
<b><i>dsMMCNetif</i></b> read-write	INTEGER <i>mcNetNone(1), mcNetEther(2), mcNetSlip(3), mcNetBoth(4)</i>	No network management port is active The network management port is the optional PCMCIA Ethernet card. The network management port is the control port running The network management port is the optional PCMCIA Ethernet card with the control port (running SLIP) providing access to the daisy chain via IP forwarding. The management access port(s) for Telnet and SNMP.
1.3.6.1.4.1.181.2.1.9.8.0		
<b><i>dsMMClpAddr</i></b> read-write	IpAddress	The unit's IP address.

OID, Name, Access	Syntax	Description
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**Table 22**

1.3.6.1.4.1.181.2.1.9.9.0

<b>dsMMcIpMask</b> read-write	IpAddress	The unit's IP subnet mask.
1.3.6.1.4.1.181.2.1.9.10.0		
<b>dsMMcDefRoute</b> read-write	IpAddress	The unit's default IP router.

**The source address screening table****Table 23**

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.9.11		
<b>dsMMcScrnTable</b> not-accessible	SEQUENCE OF DsMMcScrnEntry	The Source Address Screening table. The entries in this table are the IP addresses which are allowed to access this unit.
1.3.6.1.4.1.181.2.1.9.11.1		
<b>dsMMcScrnEntry</b> not-accessible	INDEX <i>dsMMcScrnIndex</i>	An entry in the Source Address Screening table that consists of the following objects:  <i>dsMMcScrnIndex</i> , <i>dsMMcScrnIpAddr</i>
1.3.6.1.4.1.181.2.1.9.11.1.1. <i>dsMMcScrnIndex</i>		
<b>dsMMcScrnIndex</b> read-only	INTEGER (1..10)	The index to the Management Configuration Screening table. Ten entries are possible.
1.3.6.1.4.1.181.2.1.9.11.1.2. <i>dsMMcScrnIndex</i>		
<b>dsMMcScrnIpAddr</b> read-write	IpAddress	An IP address which will be allowed to access this unit.

## The SNMP trap destination table

**Table 24**

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.9.12		
<b>dsMMcTrapTable</b> not-accessible	SEQUENCE OF DsMMcTrapEntry	The SNMP Trap Destination table. This table lists up to 10 IP addresses to send SNMP traps to when alarm conditions occur.
1.3.6.1.4.1.181.2.1.9.12.1		
<b>dsMMcTrapEntry</b> not-accessible	INDEX <i>dsMMcTrapIndex</i>	An entry in the SNMP Trap Destination table that consists of the following objects:  <i>dsMMcTrapIndex</i> , <i>dsMMcTrapIpAddr</i>
1.3.6.1.4.1.181.2.1.9.12.1.1. <i>dsMMcTrapIndex</i>		
<b>dsMMcTrapIndex</b> read-only	INTEGER (1..10)	The index to the Management Configuration Trap table.
1.3.6.1.4.1.181.2.1.9.12.1.2. <i>dsMMcTrapIndex</i>		
<b>dsMMcTrapIpAddr</b> read-write	IpAddress	An IP address to send SNMP traps to.

## Management address/mask objects

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.9.13.0		
<b>dsMMcSlpAddr</b> read-write	IpAddress	The unit's SLIP IP address.
1.3.6.1.4.1.181.2.1.9.14.0		
<b>dsMMcSlpMask</b> read-write	IpAddress	The unit's SLIP IP subnet mask.
1.3.6.1.4.1.181.2.1.9.15.0		
<b>dsMMcElpAddr</b> read-write	IpAddress	The unit's Ethernet IP address.
1.3.6.1.4.1.181.2.1.9.16.0		
<b>dsMMcElpMask</b> read-write	IpAddress	The unit's Ethernet IP subnet mask.

## The network interface configuration group

Table 25

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.10.1.0		
<b><i>dsMNCFraming</i></b> read-write	INTEGER <i>ncSF(1),</i> <i>ncESF(2),</i> <i>ncEricsson(3)</i>	SF (D4) framing ESF framing Ericsson framing  The type of framing being used on the Network Interface.
1.3.6.1.4.1.181.2.1.10.2.0		
<b><i>dsMNCoding</i></b> read-write	INTEGER <i>ncAmi(1),</i> <i>ncB8zs(2)</i>	AMI line coding B8ZS line coding  The type of line coding being used on the Network Interface.
1.3.6.1.4.1.181.2.1.10.3.0		
<b><i>dsMNC1403</i></b> read-write	INTEGER <i>ncT1403Enable(1),</i> <i>ncT1403Disable(2)</i>	Enable T1.403 messages Disable T1.403 messages  This object enables/disables the sending of T1.403 PRM messages.
1.3.6.1.4.1.181.2.1.10.4.0		
<b><i>dsMNCYellow</i></b> read-write	INTEGER <i>ncYelEnable(1),</i> <i>ncYelDisable(2)</i>	Enable sending Yellow alarm Disable sending Yellow alarm  This object enables/disables sending Yellow alarm out the Network Interface upon receipt of an alarm on the Network Interface.
1.3.6.1.4.1.181.2.1.10.5.0		
<b><i>dsMNCAddr54</i></b> read-write	INTEGER <i>ncAddrCsu(1),</i> <i>ncAddrDsu(2),</i> <i>ncAddrBoth(3)</i>	CSU addressing mode DSU addressing mode Both CSU and DSU addressing modes  If 54016 addressing is enabled, this object determines what type of addressing the unit responds to.
1.3.6.1.4.1.181.2.1.10.6.0		
<b><i>dsMNC54016</i></b> read-write	INTEGER <i>nc54016Enable(1),</i> <i>nc54016Disable(2)</i>	Enabled 54016 addressing Disable 54016 addressing  This object determines whether the unit responds to 54016 addressing modes.

**Table 25**

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.1.10.7.0		
<b><i>dsMNCnLbo</i></b> read-write	INTEGER <i>ncLbo0(1),</i> <i>ncLbo1(2),</i> <i>ncLbo2(3)</i>	0.0dB line attenuation 7.5dB line attenuation 15.0 dB line attenuation  The Network Interface Line Build Out setting.
1.3.6.1.4.1.181.2.1.10.8.0		
<b><i>dsMNCnMF16</i></b> read-write	INTEGER <i>ncMF16Enable(1),</i> <i>ncMF16Disable(2)</i>	Enable the Time Slot 16 MultiFrame alignment signal Disable the Time Slot 16 MultiFrame alignment signal  The E1 network interface Time Slot 16 MultiFrame alignment signal setting.
1.3.6.1.4.1.181.2.1.10.9.0		
<b><i>dsMNCnCRC</i></b> read-write	INTEGER <i>ncCrcEnable(1),</i> <i>ncCrcDisable(2)</i>	Enable CRC generation/checking Disable CRC generation/checking  The E1 network interface CRC generation/checking setting.
1.3.6.1.4.1.181.2.1.10.10.0		
<b><i>dsMNCnFasAlign</i></b> read-write	INTEGER <i>ncFasWord(1),</i> <i>ncNonFasWord(2)</i>	Use the NOT-FAS word Do not use the NOT-FAS word  The E1 network interface Time Slot 0 NOT-FAS Word setting.

**Table 25**

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>																
1.3.6.1.4.1.181.2.1.10.11.0																		
<b><i>dsMNcSaBit</i></b> read-write	INTEGER <i>ncSaNone(1),</i> <i>ncSaBit4(2),</i> <i>ncSaBit5(3),</i> <i>ncSaBit6(4),</i> <i>ncSaBit7(5),</i> <i>ncSaBit8(6),</i> <i>ncTS1(7),</i> <i>ncTS2(8),</i> <i>ncTS3(9),</i> <i>ncTS4(10),</i> <i>ncTS5(11),</i> <i>ncTS6(12),</i> <i>ncTS7(13),</i> <i>ncTS8(14),</i> <i>ncTS9(15),</i> <i>ncTS10(16),</i> <i>ncTS11(17),</i> <i>ncTS12(18),</i> <i>ncTS13(19),</i> <i>ncTS14(20),</i> <i>ncTS15(21),</i> <i>ncTS16(22),</i> <i>ncTS17(23),</i> <i>ncTS18(24),</i> <i>ncTS19(25),</i> <i>ncTS20(26),</i> <i>ncTS21(27),</i> <i>ncTS22(28),</i> <i>ncTS23(29),</i> <i>ncTS24(30),</i> <i>ncTS25(31),</i> <i>ncTS26(32),</i> <i>ncTS27(33),</i> <i>ncTS28(34),</i> <i>ncTS29(35),</i> <i>ncTS30(36),</i> <i>ncTS31(37)</i>	The E1 network interface Sa bit usage. If Sa bits are being used for data link communications, both the near and far end units must agree on which Sa bit to use. Possible value are:  <table><thead><tr><th>VALUE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td><i>ncSaNone(1)</i></td><td>No Sa bits are being used for data link communications</td></tr><tr><td><i>ncSaBit4(2)</i></td><td>Use Sa bit 4 for data link communications</td></tr><tr><td><i>ncSaBit5(3)</i></td><td>Use Sa bit 5 for data link communications</td></tr><tr><td><i>ncSaBit6(4)</i></td><td>Use Sa bit 6 for data link communications</td></tr><tr><td><i>ncSaBit7(5)</i></td><td>Use Sa bit 7 for data link communications</td></tr><tr><td><i>ncSaBit8(6)</i></td><td>Use Sa bit 8 for data link communications</td></tr><tr><td><i>ncTSn</i></td><td>Use TimeSlot n for data link communications.</td></tr></tbody></table> These are only available for E1 units with In-Band Link hardware.	VALUE	DESCRIPTION	<i>ncSaNone(1)</i>	No Sa bits are being used for data link communications	<i>ncSaBit4(2)</i>	Use Sa bit 4 for data link communications	<i>ncSaBit5(3)</i>	Use Sa bit 5 for data link communications	<i>ncSaBit6(4)</i>	Use Sa bit 6 for data link communications	<i>ncSaBit7(5)</i>	Use Sa bit 7 for data link communications	<i>ncSaBit8(6)</i>	Use Sa bit 8 for data link communications	<i>ncTSn</i>	Use TimeSlot n for data link communications.
VALUE	DESCRIPTION																	
<i>ncSaNone(1)</i>	No Sa bits are being used for data link communications																	
<i>ncSaBit4(2)</i>	Use Sa bit 4 for data link communications																	
<i>ncSaBit5(3)</i>	Use Sa bit 5 for data link communications																	
<i>ncSaBit6(4)</i>	Use Sa bit 6 for data link communications																	
<i>ncSaBit7(5)</i>	Use Sa bit 7 for data link communications																	
<i>ncSaBit8(6)</i>	Use Sa bit 8 for data link communications																	
<i>ncTSn</i>	Use TimeSlot n for data link communications.																	
1.3.6.1.4.1.181.2.1.10.12.0																		
<b><i>dsMNcGenRfa</i></b> read-write	INTEGER <i>ncGenRfaEnable(1),</i> <i>ncGenRfaDisable(2)</i>	Enable RFA insertion Disable RFA insertion  The status of sending E1 remote Frame Alarm into the NI during alarms.																

**Table 25**

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.10.13.0		
<b><i>dsMNCnPassTiRfa</i></b> read-write	INTEGER <i>ncPassTiRfaEnable(1)</i> , Enable RFA re-generation <i>ncPassTiRfaDisable(2)</i> Disable RFA re-generation	The status of sending the RFA received on the network interface out the terminal interface. This function is not possible on a DSU only, it must be an add/drop. This function only works if at least one channel is assigned to the TI. E1 only.
1.3.6.1.4.1.181.2.1.10.14.0		
<b><i>dsMNCnIdle</i></b> read-write	INTEGER (0..255)	The idle code to be transmitted in the idle NI and TI channels. This code is also sent in all TI channels when the TI is experiencing an OOF.

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# The password configuration group

## The password configuration table

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.11.1		
<b>dsMPcTable</b> not-accessible	SEQUENCE OF DsMPcEntry	The Password Configuration table. This table contains password configuration information.
1.3.6.1.4.1.181.2.1.11.1.1		
<b>dsMPcEntry</b> not-accessible	INDEX <i>dsMPcIndex</i>	An entry in the Password Configuration table that consists of the following objects:  <i>dsMPcIndex</i> , <i>dsMPcPasswd</i> , <i>dsMPcPriv</i> , <i>dsMPcDelete</i>
1.3.6.1.4.1.181.2.1.11.1.1.1. <i>dsMPcIndex</i>		
<b>dsMPcIndex</b> read-only	INTEGER (1..10)	The index to the password configuration table.
1.3.6.1.4.1.181.2.1.11.1.1.2. <i>dsMPcIndex</i>		
<b>dsMPcPasswd</b> read-write	DisplayString (SIZE (6..12))	The textual password. For security reasons, asterisks are shown vice the actual password. Also, this variable is read-only.
1.3.6.1.4.1.181.2.1.11.1.1.3. <i>dsMPcIndex</i>		
<b>dsMPcPriv</b> read-write	INTEGER <i>pcSAPriv(1)</i> , <i>pcCAPriv(2)</i> , <i>pcMAPriv(3)</i> , <i>pcNAPriv(4)</i>	Super User password Configuration password Maintenance password Normal Access password  The privilege level of the password.
1.3.6.1.4.1.181.2.1.11.1.1.4. <i>dsMPcIndex</i>		
<b>dsMPcDelete</b> read-write	INTEGER <i>pcIdle(1)</i> , <i>pcDelete(2)</i> ,	Setting this object to <i>pcDelete(2)</i> will delete the password specified by the <i>dsMPcIndex</i> value. After the password is deleted, this value will return to its normal value of <i>pcIdle(1)</i> .

# The system configuration group

Table 26

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.12.1.0		
<b>dsMSMonth</b> read-write	INTEGER (1..12)	The calendar number of the current month. 1 is January.
1.3.6.1.4.1.181.2.1.12.2.0		
<b>dsMSDay</b> read-write	INTEGER (1..31)	The number of the current day.
1.3.6.1.4.1.181.2.1.12.3.0		
<b>dsMSYear</b> read-write	INTEGER (0..99)	The number of the current year. 95 is 1995.
1.3.6.1.4.1.181.2.1.12.4.0		
<b>dsMSHour</b> read-write	INTEGER (0..23)	The number of the current hour. 0 is 12:00am.
1.3.6.1.4.1.181.2.1.12.5.0		
<b>dsMSMinutes</b> read-write	INTEGER (0..59)	The number of the current minute.
1.3.6.1.4.1.181.2.1.12.6.0		
<b>dsMSName</b> read-write	DisplayString (SIZE (0..15))	The Site Name of the unit.
1.3.6.1.4.1.181.2.1.12.7.0		
<b>dsMSSlotAddr</b> read-write	INTEGER (0..15)	The Kentrox-specific slot address. The 01 in the address 01:02:003.
1.3.6.1.4.1.181.2.1.12.8.0		
<b>dsMSShelfAddr</b> read-write	INTEGER (0..15)	The Kentrox-specific shelf address. The 02 in the address 01:02:003.
1.3.6.1.4.1.181.2.1.12.9.0		
<b>dsMSGroupAddr</b> read-write	INTEGER (0..255)	The Kentrox-specific group address. The 003 in the address 01:02:003.
1.3.6.1.4.1.181.2.1.12.10.0		
<b>dsMSFrontPanel</b> read-write	INTEGER <i>scFpEnable(1), scFpDisable(2)</i>	Enable the front panel buttons Disable the front panel buttons  The status of the front panel buttons.

**Table 26**

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.1.12.11.0		
<b><i>dsMScDSCompatible</i></b> read-write	INTEGER <i>scDSEnable(1),</i> <i>scDSDisable(2)</i>	Enable the DataSMART compatibility function Disable the DataSMART compatibility function  The status of the DataSMART compatibility function. This should be enabled when the far-end unit is a DataSMART 78000 series unit and disabled when it is a DataSMART 72000 series unit (including MAX and SPort).
1.3.6.1.4.1.181.2.1.12.12.0		
<b><i>dsMScClockSource</i></b> read-write	INTEGER <i>scLoopTiming(1),</i> <i>scInternalTiming(2),</i> <i>scExternalTiming(3),</i> <i>scTiTiming(4),</i> <i>scDP1Timing(5),</i> <i>scDP2Timing(6),</i> <i>scDP3Timing(7),</i> <i>scDP4Timing(8)</i>	Use the clock from the network Use the internal clock Use the clock from the external clock input Use the clock coming in on the Terminal Interface Use the clock coming in on data port 1 Use the clock coming in on data port 2 Use the clock coming in on data port 3 Use the clock coming in on data port 4  The source of the timing clock.
1.3.6.1.4.1.181.2.1.12.13.0		
<b><i>dsMScAutologout</i></b> read-write	INTEGER (0..60)	The time (in minutes) to wait for a keypress before logging the current user out. If this object is set to 0, autologout is disabled.
1.3.6.1.4.1.181.2.1.12.14.0		
<b><i>dsMScZeroPerData</i></b> read-write	INTEGER <i>scZallIdle(1),</i> <i>scZallStart(2)</i>	This object will zero all performance report counters if it is set to scZallStart(2).
1.3.6.1.4.1.181.2.1.12.15.0		
<b><i>dsMScWvv</i></b> read-only	DisplayString (SIZE (0..255))	The string returned by the user interface command WVV, What's Your Version.
1.3.6.1.4.1.181.2.1.12.16.0		
<b><i>dsMScResetDeflts</i></b> read-write	INTEGER <i>scRSDIdle(1),</i> <i>scRSDStart(2)</i>	This object will restore all the default settings of the unit if it is set to scRSDstart(2).
1.3.6.1.4.1.181.2.1.12.17.0		
<b><i>dsMScAutoCfg</i></b> read-write	INTEGER <i>scAcEnable(1),</i> <i>scAcDisable(2)</i>	This object enables/disables the Auto-Configuration feature, which allows units in a daisy chain to be automatically configured by the Daisy Chain Controller. This feature is only available in the DataSMART SPort.

## The terminal interface configuration group

**Table 27**

OID, Name, Access	Syntax	Description
1.3.6.1.4.1.181.2.1.13.1.0		
<b><i>dsMTcFraming</i></b> read-write	INTEGER <i>tcSF(1), tcESF(2), tcEricsson(3)</i>	SF (D4) framing ESF framing Ericsson framing  The line framing for the Terminal Interface.
1.3.6.1.4.1.181.2.1.13.2.0		
<b><i>dsMTcCoding</i></b> read-write	INTEGER <i>tcAmi(1), tcB8zs(2)</i>	AMI line coding B8ZS line coding  The line coding for the Terminal Interface.
1.3.6.1.4.1.181.2.1.13.3.0		
<b><i>dsMTcIdle</i></b> read-write	INTEGER (0..255)	The code that is sent out the idle DS0 channels of the terminal interface.
1.3.6.1.4.1.181.2.1.13.4.0		
<b><i>dsMTcEqual</i></b> read-write	INTEGER <i>tcTe0(1), tcTe1(2), tcTe2(3), tcTe3(4), tcTe4(5)</i>	0-133 feet 133-266 feet 266-399 feet 399-533 feet 533-655 feet  The line equalization for the Terminal Interface.
1.3.6.1.4.1.181.2.1.13.5.0		
<b><i>dsMTcMF16</i></b> read-write	INTEGER <i>tcMF16Enable(1), tcMF16Disable(2)</i>	Enable the Time Slot 16 MultiFrame alignment signal Disable the Time Slot 16 MultiFrame alignment signal  The E1 terminal interface Time Slot 16 MultiFrame alignment signal setting.
1.3.6.1.4.1.181.2.1.13.6.0		
<b><i>dsMTcCRC</i></b> read-write	INTEGER <i>tcCrcEnable(1), tcCrcDisable(2)</i>	Enable CRC generation/checking Disable CRC generation/checking  The E1 terminal interface CRC generation/checking setting.

**Table 27**

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.4.1.181.2.1.13.7.0		
<b><i>dsMTcFasAlign</i></b> read-write	INTEGER <i>tcFasWord(1),</i> <i>tcNonFasWord(2)</i>	Use the NOT-FAS word Do not use the NOT-FAS word  The E1 terminal interface Time Slot 0 NOT-FAS Word setting.
1.3.6.1.4.1.181.2.1.13.8.0		
<b><i>dsMTcAis</i></b> read-write	INTEGER <i>tcAisEnable(1),</i> <i>tcAisDisable(2)</i>	Enable sending AIS alarms Disable sending AIS alarms  This object controls the sending of Alarm Indication Signal (AIS) alarms.
1.3.6.1.4.1.181.2.1.13.9.0		
<b><i>dsMTcGenRfa</i></b> read-write	INTEGER <i>tcGenRfaEnable(1),</i> <i>tcGenRfaDisable(2)</i>	Enable RFA insertion Disable RFA insertion  The status of sending E1 remote Frame Alarm into the TI during alarms.
1.3.6.1.4.1.181.2.1.13.10.0		
<b><i>dsMTcPassTiRfa</i></b> read-write	INTEGER <i>tcPassTiRfaEnable(1),</i> <i>tcPassTiRfaDisable(2)</i>	Enable RFA re-generation Disable RFA re-generation  The status of sending the RFA received on the terminal interface out the network interface. This function is not possible on a DSU only, it must be an add/drop. This function only works if at least one channel is assigned to the TI. E1 only.



# 5

## *DS1 MIB — RFC 1406*

---

Request For Comments (RFC) 1406 is the industry standard MIB for DS1 circuits. This chapter includes the following sections:

- DS1 MIB road map
- A complete listing of the DataSMART DSU/CSU support of the DS1 MIB. Only supported MIB variables are listed.

---

# The DS1 MIB road map

*SNMP MIBs are not always the easiest documents to navigate. This road map should enable you to more quickly find what you are looking for.*

---

## MIB root down to DS1

```
iso(1)
  org(3)
    dod(6)
      internet(1)
        mgmt(2)
          mib-2(1)
            transmission(10)
              ds1(18)
```

## The DS1 configuration table

See [page 155](#)

```
ds1(18)
  dsx1ConfigTable(6)
    dsx1ConfigEntry(1)
      dsx1LineIndex(1)
      dsx1IfIndex(2)
      dsx1TimeElapsed(3)
      dsx1ValidIntervals(4)
      dsx1LineType(5)
      dsx1LineCoding(6)
      dsx1SendCode(7)
      dsx1CircuitIdentifier(8)
      dsx1LoopbackConfig(9)
      dsx1LineStatus(10)
      dsx1SignalMode(11)
      dsx1TransmitClockSource(12)
      dsx1Fdl(13)
```

## The DS1 current table

See [page 159](#)

```
dsx1CurrentTable(7)
  dsx1CurrentEntry(1)
    dsx1CurrentIndex(1)
    dsx1CurrentESs(2)
    dsx1CurrentSESSs(3)
    dsx1CurrentUASSs(5)
    dsx1CurrentCSSs(6)
    dsx1CurrentPCVs(7)
    dsx1CurrentBESSs(9)
    dsx1CurrentDMs(10)
    dsx1CurrentLCVs(11)
```

## **The DS1 interval table**

See [page 161](#)

**dsx1IntervalTable(8)**  
dsx1IntervalEntry(1)  
  dsx1IntervalIndex(1)  
  dsx1IntervalNumber(2)  
  dsx1IntervalESs(3)  
  dsx1IntervalSESSs(4)  
  dsx1IntervalUASs(6)  
  dsx1IntervalCSSs(7)  
  dsx1IntervalPCVs(8)  
  dsx1IntervalBESs(10)  
  dsx1IntervalDMs(11)  
  dsx1IntervalLCVs(12)

## **The DS1 total table**

See [page 163](#)

**dsx1TotalTable(9)**  
dsx1TotalEntry(1)  
  dsx1TotalIndex(1)  
  dsx1TotalESs(2)  
  dsx1TotalSESSs(3)  
  dsx1TotalUASs(5)  
  dsx1TotalCSSs(6)  
  dsx1TotalPCVs(7)  
  dsx1TotalBESs(9)  
  dsx1TotalDMs(10)  
  dsx1TotalLCVs(11)

## **The DS1 far end current table**

See [page 165](#)

**dsx1FarEndCurrentTable(10)**  
**dsx1FarEndCurrentEntry(1)**  
  dsx1FarEndCurrentIndex(1)  
  dsx1FarEndTimeElapsed(2)  
  dsx1FarEndValidIntervals(3)  
  dsx1FarEndCurrentESs(4)  
  dsx1FarEndCurrentSESSs(5)  
  dsx1FarEndCurrentUASs(7)  
  dsx1FarEndCurrentCSSs(8)  
  dsx1FarEndCurrentPCVs(10)  
  dsx1FarEndCurrentBESs(11)  
  dsx1FarEndCurrentDMs(12)

## **The DS1 far end interval table**

See [page 167](#)

**dsx1FarEndIntervalTable(11)**  
**dsx1FarEndIntervalEntry(1)**  
  dsx1FarEndIntervalIndex(1)  
  dsx1FarEndIntervalNumber(2)  
  dsx1FarEndIntervalESs(3)  
  dsx1FarEndIntervalSESSs(4)  
  dsx1FarEndIntervalUASs(6)  
  dsx1FarEndIntervalCSSs(7)  
  dsx1FarEndIntervalPCVs(9)  
  dsx1FarEndIntervalBESs(10)  
  dsx1FarEndIntervalDMs(11)

## **The DS1 far end total table**

See [page 169](#)

**dsx1FarEndTotalTable(12)**  
**dsx1FarEndTotalEntry(1)**  
  dsx1FarEndTotalIndex(1)  
  dsx1FarEndTotalESSs(2)  
  dsx1FarEndTotalSESSs(3)  
  dsx1FarEndTotalUASs(5)  
  dsx1FarEndTotalCSSs(6)  
  dsx1FarEndTotalPCVs(8)  
  dsx1FarEndTotalBESs(9)  
  dsx1FarEndTotalDMs(10)

## **The DS1 fractional table**

See [page 171](#)

**dsx1FracTable(13)**  
**dsx1FracEntry(1)**  
  dsx1FracIndex(1)  
  dsx1FracNumber(2)  
  dsx1FracIfIndex(3)

# The DS1 configuration table

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.10.18.6		
<b>dsx1ConfigTable</b> not-accessible	SEQUENCE OF Dsx1ConfigEntry	The DS1 Configuration table.
1.3.6.1.2.1.10.18.6.1		
<b>dsx1ConfigEntry</b> not-accessible	INDEX <i>dsx1LineIndex</i>	An entry in the DS1 Configuration table that consists of the following objects:  <i>dsx1LineIndex,</i> <i>dsx1IfIndex,</i> <i>dsx1TimeElapsed,</i> <i>dsx1ValidIntervals,</i> <i>dsx1LineType,</i> <i>dsx1LineCoding,</i> <i>dsx1SendCode,</i> <i>dsx1CircuitIdentifier,</i> <i>dsx1LoopbackConfig,</i> <i>dsx1LineStatus,</i> <i>dsx1SignalMode,</i> <i>dsx1TransmitClockSource,</i> <i>dsx1Fdl</i>
1.3.6.1.2.1.10.18.6.1.1. <i>dsx1LineIndex</i>		
<b>dsx1LineIndex</b> read-only	INTEGER 1 2	Network interface Terminal interface
1.3.6.1.2.1.10.18.6.1.2. <i>dsx1LineIndex</i>		
<b>dsx1IfIndex</b> read-only	INTEGER 1 2	Network interface Terminal interface
1.3.6.1.2.1.10.18.6.1.3. <i>dsx1LineIndex</i>		
<b>dsx1TimeElapsed</b> read-only	INTEGER (0..899)	The number of seconds in the current 15-minute interval.
1.3.6.1.2.1.10.18.6.1.4. <i>dsx1LineIndex</i>		
<b>dsx1ValidIntervals</b> read-only	INTEGER (0..96)	The number of complete 15-minute intervals for near-end data. In the advent of a power-fail, the unit will adjust the counter for the number of 15-minute intervals the power was off. If the power was off for more than 96 intervals, the counter is reset to zero.  This method may leave invalid data in intervals. The unit compensates for this by setting all the data in these intervals to zero. This makes the interval counter non-compliant with RFC 1406, but the performance data interval and 24-hour total counters represent information as accurately as possible.

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.10.18.6.1.5.dsx1LineIndex		
<b>dsx1LineType</b> read-write	INTEGER <i>other(1), dsx1ESF(2), dsx1D4(3)</i>	Enable Ericsson framing Enable ESF framing Enable SF (D4) framing
1.3.6.1.2.1.10.18.6.1.6.dsx1LineIndex		
<b>dsx1LineCoding</b> read-write	INTEGER <i>dsx1B8ZS(2), dsx1AMI(5)</i>	Enable B8ZS coding Enable AMI coding
1.3.6.1.2.1.10.18.6.1.7.dsx1LineIndex		
<b>dsx1SendCode</b> read-write	INTEGER <i>dsx1SendNoCode(1), dsx1SendLineCode(2), dsx1SendPayloadCode(3), dsx1SendResetCode(4), dsx1SendQRS(5), dsx1Send511Pattern(6), dsx1Send3in24Pattern(7), dsx1SendOtherTestPattern(8)</i>	No code is being sent Send line loopback Send payload loopback Send test code and loopback reset Send QRS test code Send 511 test code Send 3-in-24 test code Send 2047 test code  If NI or TI <i>dsx1LoopbackConfig</i> is set to something other than <i>dsx1NoLoop(1)</i> , and a set is attempted on the <i>dsx1SendCode</i> variable, SNMP <i>genErr</i> is returned.  The TI instance of this variable is locked to <i>dsx1SendNoCode(1)</i> . A set to any other value will return <i>badValue</i> .
1.3.6.1.2.1.10.18.6.1.8.dsx1LineIndex		
<b>dsx1CircuitIdentifier</b> read-write	DisplayString (SIZE (0..255))	This is a string identifier unique to the DS1 MIB. This value does <i>not</i> correspond to the Site Name, <i>nor</i> does it correspond to the <i>sysName</i> in MIB II.
1.3.6.1.2.1.10.18.6.1.9.dsx1LineIndex		
<b>dsx1LoopbackConfig</b> read-write	INTEGER <i>dsx1NoLoop(1), dsx1PayloadLoop(2), dsx1LineLoop(3)</i>	No loopback is set Set payload loopback Set line loopback  For a TI interface, <i>dsx1LineLoop(3)</i> = TI loopback and <i>dsx1PayloadLoop(2)</i> = local loopback.  If the NI instance of <i>dsx1SendCode</i> has a value other than <i>dsx1SendNoCode(1)</i> and a set is attempted on the NI or TI variable <i>dsx1LoopbackConfig</i> , SNMP <i>genErr</i> is returned.  A payload loopback can be set only when all channels are mapped to the TI interface.

OID, Name, Access	Syntax	Description										
1.3.6.1.2.1.10.18.6.1.10.dsx1LineIndex												
<b>dsx1LineStatus</b> read-only	INTEGER <i>dsx1NoAlarm(1)</i> <i>dsx1RcvFarEndLOF(2)</i> <i>dsx1XmtFarEndLOF(4)</i> <i>dsx1RcvAIS(8)</i> <i>dsx1XmtAIS(16)</i> <i>dsx1LossOfFrame(32)</i> <i>dsx1LossOfSignal(64)</i> <i>dsx1LoopbackState(128)</i> <i>dsx1T16AIS (256)</i> <i>dsx1RcvFarEndLOMF(512)</i> <i>dsx1XmtFarEndLOMF(1024)</i> <i>dsx1RcvTestCode(2048)</i> <i>dsx1OtherFailure(4096)</i>	No alarm is active Receiving far end Loss of Frame (Yellow alarm) Transmitting far end Loss of Frame Receiving Alarm Indication Signal (AIS) Transmitting Alarm Indication Signal (AIS) Loss of Frame (OOF) Loss of Signal (LOS) A loopback is active TS16 AIS (E1 only) Receiving TS16 Loss of Multiframe (E1 only) Transmitting TS16 Loss of Multiframe (E1 only) Receiving a test code Any line status not defined here  This variable is a bitmap. It gives you a snapshot of the network interface.										
1.3.6.1.2.1.10.18.6.1.11.dsx1LineIndex												
<b>dsx1SignalMode</b> read-write	INTEGER <i>none(1)</i>	DataSMART does not do any signaling. <i>badValue</i> is returned if any value other than <i>none(1)</i> is attempted to be set.										
1.3.6.1.2.1.10.18.6.1.12.dsx1LineIndex												
<b>dsx1TransmitClockSource</b> read-write	INTEGER <i>loopTiming(1)</i> <i>localTiming(2)</i> <i>throughTiming(3)</i>	Only the NI side can be set. A set on the TI side will return an error. To set this variable, use this table:  <table style="margin-left: 200px;"> <tr> <td><i>loopTiming(1)</i></td> <td>CLK:L</td> </tr> <tr> <td><i>localTiming(2)</i></td> <td>CLK:I</td> </tr> <tr> <td><i>throughTiming(3)</i></td> <td>CLK:T — to set this mode, a TI side must exist and have DS0 channels mapped to it</td> </tr> </table> When reading this variable, use the following table to interpret the settings:	<i>loopTiming(1)</i>	CLK:L	<i>localTiming(2)</i>	CLK:I	<i>throughTiming(3)</i>	CLK:T — to set this mode, a TI side must exist and have DS0 channels mapped to it				
<i>loopTiming(1)</i>	CLK:L											
<i>localTiming(2)</i>	CLK:I											
<i>throughTiming(3)</i>	CLK:T — to set this mode, a TI side must exist and have DS0 channels mapped to it											
		<table style="margin-left: 200px;"> <tr> <td>CLK:L NI = <i>loopTiming</i></td> <td>TI = <i>throughTiming</i></td> </tr> <tr> <td>CLK:T NI = <i>throughTiming</i></td> <td>TI = <i>loopTiming</i></td> </tr> <tr> <td>CLK:I NI = <i>localTiming</i></td> <td>TI = <i>localTiming</i></td> </tr> <tr> <td>CLK:C NI = <i>throughTiming</i></td> <td>TI = <i>throughTiming</i></td> </tr> <tr> <td>CLK:K NI = <i>throughTiming</i></td> <td>TI = <i>localTiming</i></td> </tr> </table>	CLK:L NI = <i>loopTiming</i>	TI = <i>throughTiming</i>	CLK:T NI = <i>throughTiming</i>	TI = <i>loopTiming</i>	CLK:I NI = <i>localTiming</i>	TI = <i>localTiming</i>	CLK:C NI = <i>throughTiming</i>	TI = <i>throughTiming</i>	CLK:K NI = <i>throughTiming</i>	TI = <i>localTiming</i>
CLK:L NI = <i>loopTiming</i>	TI = <i>throughTiming</i>											
CLK:T NI = <i>throughTiming</i>	TI = <i>loopTiming</i>											
CLK:I NI = <i>localTiming</i>	TI = <i>localTiming</i>											
CLK:C NI = <i>throughTiming</i>	TI = <i>throughTiming</i>											
CLK:K NI = <i>throughTiming</i>	TI = <i>localTiming</i>											

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.10.18.6.1.13. <i>dsx1LineIndex</i>		
<b>dsx1Fdl</b> read-write	<p>INTEGER  <i>other</i>(1),  <i>dsx1Ansi-T1-403</i>(2),  <i>dsx1Att-54016</i>(4),  <i>dsx1Fdl-none</i>(8)</p>	<p>proprietary  ANSI T1-403  ESF  none</p> <p>This variable is always set to <i>dsx1Fdl-none</i> for the TI side. If FDL is available for the NI side (i.e., if <i>dsx1LineType</i> is set to <i>dsx1ESF</i>), this variable is set to 7. Otherwise it is set to <i>dsx1Fdl-none</i>.</p> <p>RFC 1406 has a bug in this variable definition. The intent was for this variable to be a bit-map, but RFC 1406 defines it to be an enumerated type. The DataSMART follows the intended path for implementation.</p> <p>In order for a network management system to work properly with this device, the Kentrox version of RFC 1406 must be used. See “<a href="#">MIB source files</a>” on page 9.</p>

## The DS1 current table

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.10.18.7		
<b>dsx1CurrentTable</b> not-accessible	SEQUENCE OF Dsx1CurrentEntry	The DS1 Current table.
1.3.6.1.2.1.10.18.7.1		
<b>dsx1CurrentEntry</b> not-accessible	INDEX <i>dsx1CurrentIndex</i>	An entry in the DS1 Current table that consists of the following objects:  <i>dsx1CurrentIndex,</i> <i>dsx1CurrentESS,</i> <i>dsx1CurrentSESS,</i> <i>dsx1CurrentUASs,</i> <i>dsx1CurrentCSSs,</i> <i>dsx1CurrentPCVs,</i> <i>dsx1CurrentBESS,</i> <i>dsx1CurrentDMs,</i> <i>dsx1CurrentLCVs</i>
1.3.6.1.2.1.10.18.7.1.1. <i>dsx1CurrentIndex</i>		
<b>dsx1CurrentIndex</b> read-only	INTEGER 1, 2	Network interface Terminal interface
1.3.6.1.2.1.10.18.7.1.2. <i>dsx1CurrentIndex</i>		
<b>dsx1CurrentESSs</b> read-only	Gauge (0..900)	The number of Errored Seconds encountered in the current 15-minute interval.
1.3.6.1.2.1.10.18.7.1.3. <i>dsx1CurrentIndex</i>		
<b>dsx1CurrentSESSs</b> read-only	Gauge (0..900)	The number of Severely Errored Seconds encountered in the current 15-minute interval.
1.3.6.1.2.1.10.18.7.1.5. <i>dsx1CurrentIndex</i>		
<b>dsx1CurrentUASs</b> read-only	Gauge (0..900)	The number of Unavailable Seconds encountered in the current 15-minute interval.
1.3.6.1.2.1.10.18.7.1.6. <i>dsx1CurrentIndex</i>		
<b>dsx1CurrentCSSs</b> read-only	Gauge (0..900)	The number of Controlled Slip Seconds encountered by a DS1 interface in the current 15-minute interval.
1.3.6.1.2.1.10.18.7.1.7. <i>dsx1CurrentIndex</i>		
<b>dsx1CurrentPCVs</b> read-only	Gauge (0..900)	The number of Path Coding Violations encountered by a DS1 interface in the current 15-minute interval.
1.3.6.1.2.1.10.18.7.1.9. <i>dsx1CurrentIndex</i>		
<b>dsx1CurrentBESSs</b> read-only	Gauge (0..900)	The number of Bursty Errored Seconds (BESS) encountered by a DS1 interface in the current 15-minute interval.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.10.18.7.1.10. <i>dsx1CurrentIndex</i>		
<b><i>dsx1CurrentDMs</i></b> read-only	Gauge (0..15)	The number of Degraded Minutes (DMs) encountered by a DS1 interface in the current 15-minute interval.
1.3.6.1.2.1.10.18.7.1.11. <i>dsx1CurrentIndex</i>		
<b><i>dsx1CurrentLCVs</i></b> read-only	Gauge (0..999,999)	The number of Line Code Violations (LCVs) encountered by a DS1 interface in the current 15-minute interval.

## The DS1 interval table

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.10.18.8		
<b>dsx1IntervalTable</b> not-accessible	SEQUENCE OF Dsx1IntervalEntry	The DS1 Interval table.
1.3.6.1.2.1.10.18.8.1		
<b>dsx1IntervalEntry</b> not-accessible	INDEX <i>dsx1IntervalIndex</i> , <i>dsx1IntervalNumber</i>	An entry in the DS1 Interval table that consists of the following objects: <i>dsx1IntervalIndex</i> , <i>dsx1IntervalNumber</i> , <i>dsx1IntervalESSs</i> , <i>dsx1IntervalSESSs</i> , <i>dsx1IntervalUASs</i> , <i>dsx1IntervalCSSs</i> , <i>dsx1IntervalPCVs</i> , <i>dsx1IntervalBESSs</i> , <i>dsx1IntervalDMs</i> , <i>dsx1IntervalLCVs</i>
1.3.6.1.2.1.10.18.8.1.1. <i>dsx1IntervalIndex.dsx1IntervalNumber</i>		
<b>dsx1IntervalIndex</b> read-only	INTEGER 1, 2	Network interface Terminal interface
1.3.6.1.2.1.10.18.8.1.2. <i>dsx1IntervalIndex.dsx1IntervalNumber</i>		
<b>dsx1IntervalNumber</b> read-only	INTEGER (1..96)	A number between 1 and 96, where 1 is the most recently completed 15-minute interval and 96 is the least recently completed 15-minute interval (assuming that all 96 intervals are valid).
1.3.6.1.2.1.10.18.8.1.3. <i>dsx1IntervalIndex.dsx1IntervalNumber</i>		
<b>dsx1IntervalESSs</b> read-only	Gauge	The number of Errrored Seconds encountered by a DS1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.2.1.10.18.8.1.4. <i>dsx1IntervalIndex.dsx1IntervalNumber</i>		
<b>dsx1IntervalSESSs</b> read-only	Gauge	The number of Severely Errrored Seconds encountered by a DS1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.2.1.10.18.8.1.6. <i>dsx1IntervalIndex.dsx1IntervalNumber</i>		
<b>dsx1IntervalUASs</b> read-only	Gauge	The number of Unavailable Seconds encountered by a DS1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.2.1.10.18.8.1.7. <i>dsx1IntervalIndex.dsx1IntervalNumber</i>		
<b>dsx1IntervalCSSs</b> read-only	Gauge	The number of Controlled Slip Seconds encountered by a DS1 interface in one of the previous 96 15-minute intervals.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.10.18.8.1.8.dsx1IntervalIndex.dsx1IntervalNumber		
<b>dsx1IntervalPCVs</b> read-only	Gauge	The number of Path Coding Violations encountered by a DS1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.2.1.10.18.8.1.10.dsx1IntervalIndex.dsx1IntervalNumber		
<b>dsx1IntervalBESs</b> read-only	Gauge	The number of Bursty Errored Seconds (BESs) encountered by a DS1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.2.1.10.18.8.1.11.dsx1IntervalIndex.dsx1IntervalNumber		
<b>dsx1IntervalDMs</b> read-only	Gauge	The number of Degraded Minutes (DMs) encountered by a DS1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.2.1.10.18.8.1.12.dsx1IntervalIndex.dsx1IntervalNumber		
<b>dsx1IntervalLCVs</b> read-only	Gauge	The number of Line Code Violations (LCVs) encountered by a DS1 interface in one of the previous 96 15-minute intervals.

## The DS1 total table

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.10.18.9		
<b>dsx1TotalTable</b> not-accessible	SEQUENCE OF Dsx1TotalEntry	The DS1 Total table. 24-hour interval.
1.3.6.1.2.1.10.18.9.1		
<b>dsx1TotalEntry</b> not-accessible	INDEX dsx1TotalIndex	An entry in the DS1 Total table that consists of the following objects: <i>dsx1TotalIndex,</i> <i>dsx1TotalESs,</i> <i>dsx1TotalSESSs,</i> <i>dsx1TotalUASSs,</i> <i>dsx1TotalCSSs,</i> <i>dsx1TotalPCVs,</i> <i>dsx1TotalBESSs,</i> <i>dsx1TotalDMs,</i> <i>dsx1TotalLCVs</i>
1.3.6.1.2.1.10.18.9.1.1.dsx1TotalIndex		
<b>dsx1TotalIndex</b> read-only	INTEGER 1, 2	Network interface Terminal interface
1.3.6.1.2.1.10.18.9.1.2.dsx1TotalIndex		
<b>dsx1TotalESs</b> read-only	Gauge	The number of Errored Seconds encountered by a DS1 interface in the previous 24-hour interval.
1.3.6.1.2.1.10.18.9.1.3.dsx1TotalIndex		
<b>dsx1TotalSESSs</b> read-only	Gauge	The number of Severely Errrored Seconds encountered by a DS1 interface in the previous 24-hour interval.
1.3.6.1.2.1.10.18.9.1.5.dsx1TotalIndex		
<b>dsx1TotalUASSs</b> read-only	Gauge	The number of Unavailable Seconds encountered by a DS1 interface in the previous 24-hour interval.
1.3.6.1.2.1.10.18.9.1.6.dsx1TotalIndex		
<b>dsx1TotalCSSs</b> read-only	Gauge	The number of Controlled Slip Seconds encountered by a DS1 interface in the previous 24-hour interval.
1.3.6.1.2.1.10.18.9.1.7.dsx1TotalIndex		
<b>dsx1TotalPCVs</b> read-only	Gauge	The number of Path Coding Violations encountered by a DS1 interface in the previous 24-hour interval.
1.3.6.1.2.1.10.18.9.1.9.dsx1TotalIndex		
<b>dsx1TotalBESSs</b> read-only	Gauge	The number of Bursty Errrored Seconds (BESSs) encountered by a DS1 interface in the previous 24-hour interval.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.10.18.9.1.10. <i>dsx1TotalIndex</i>		
<b><i>dsx1TotalDMs</i></b> read-only	Gauge	The number of Degraded Minutes (DMs) encountered by a DS1 interface in the previous 24-hour interval.
1.3.6.1.2.1.10.18.9.1.11. <i>dsx1TotalIndex</i>		
<b><i>dsx1TotalLCVs</i></b> read-only	Gauge	The number of Line Code Violations (LCVs) encountered by a DS1 interface in the previous 24-hour interval.

## The DS1 far end current table

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.10.18.10		
<b>dsx1FarEndCurrentTable</b> not-accessible	SEQUENCE OF Dsx1FarEndCurrentEntry	The DS1 Far End Current table.
1.3.6.1.2.1.10.18.10.1		
<b>dsx1FarEndCurrentEntry</b> not-accessible	INDEX <i>dsx1FarEndCurrentIndex</i>	An entry in the DS1 Far End Current table that consists of the following objects:  <i>dsx1FarEndCurrentIndex,</i> <i>dsx1FarEndTimeElapsed,</i> <i>dsx1FarEndValidIntervals,</i> <i>dsx1FarEndCurrentESs,</i> <i>dsx1FarEndCurrentSESSs,</i> <i>dsx1FarEndCurrentUASs,</i> <i>dsx1FarEndCurrentCSSs,</i> <i>dsx1FarEndCurrentPCVs,</i> <i>dsx1FarEndCurrentBESSs,</i> <i>dsx1FarEndCurrentDMs</i>
1.3.6.1.2.1.10.18.10.1.1. <i>dsx1FarEndCurrentIndex</i>		
<b>dsx1FarEndCurrentIndex</b> read-only	INTEGER 1, 2	Network interface Terminal interface
1.3.6.1.2.1.10.18.10.1.2. <i>dsx1FarEndCurrentIndex</i>		
<b>dsx1FarEndTimeElapsed</b> read-only	INTEGER (0..899)	The number of seconds that have elapsed since the beginning of the far end current error-measurement period.
1.3.6.1.2.1.10.18.10.1.3. <i>dsx1FarEndCurrentIndex</i>		
<b>dsx1FarEndValidIntervals</b> read-only	INTEGER (0..96)	The number of complete 15-minute intervals for near-end data. In the advent of a power-fail, the unit will adjust the counter for the number of 15-minute intervals the power was off. If the power was off for more than 96 intervals, the counter is reset to zero.  This method may leave invalid data in intervals. The unit compensates for this by setting all the data in these intervals to zero. This makes the interval counter non-compliant with RFC 1406, but the performance data interval and 24-hour total counters represent information as accurately as possible.
1.3.6.1.2.1.10.18.10.1.4. <i>dsx1FarEndCurrentIndex</i>		
<b>dsx1FarEndCurrentESs</b> read-only	Gauge	The number of Far End Errrored Seconds encountered by a DS1 interface in the current 15-minute interval.
1.3.6.1.2.1.10.18.10.1.5. <i>dsx1FarEndCurrentIndex</i>		
<b>dsx1FarEndCurrentSESSs</b> read-only	Gauge	The number of Far End Severely Errrored Seconds encountered by a DS1 interface in the current 15-minute interval.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.10.18.10.1.7.dsx1FarEndCurrentIndex		
<b>dsx1FarEndCurrentUAs</b> Gauge read-only		The number of Unavailable Seconds encountered by a DS1 interface in the current 15-minute interval.
1.3.6.1.2.1.10.18.10.1.8.dsx1FarEndCurrentIndex		
<b>dsx1FarEndCurrentCSSs</b> Gauge read-only		The number of Far End Controlled Slip Seconds encountered by a DS1 interface in the current 15-minute interval.
1.3.6.1.2.1.10.18.10.1.10.dsx1FarEndCurrentIndex		
<b>dsx1FarEndCurrentPCVs</b> Gauge read-only		The number of Far End Path Coding Violations reported via the far end block error count encountered by a DS1 interface in the current 15-minute interval.
1.3.6.1.2.1.10.18.10.1.11.dsx1FarEndCurrentIndex		
<b>dsx1FarEndCurrentBESs</b> Gauge read-only		The number of Bursty Errored Seconds (BESs) encountered by a DS1 interface in the current 15-minute interval.
1.3.6.1.2.1.10.18.10.1.12.dsx1FarEndCurrentIndex		
<b>dsx1FarEndCurrentDMs</b> Gauge read-only		The number of Degraded Minutes (DMs) encountered by a DS1 interface in the current 15-minute interval.

## The DS1 far end interval table

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.10.18.11		
<b>dsx1FarEndIntervalTable</b> not-accessible	SEQUENCE OF Dsx1FarEndIntervalEntry	The DS1 Far End Interval table.
1.3.6.1.2.1.10.18.11.1		
<b>dsx1FarEndIntervalEntry</b> not-accessible	INDEX <i>dsx1FarEndIntervalIndex</i> , <i>dsx1FarEndIntervalNumber</i>	An entry in the DS1 Far End Interval table that consists of the following objects:  <i>dsx1FarEndIntervalIndex</i> , <i>dsx1FarEndIntervalNumber</i> , <i>dsx1FarEndIntervalESs</i> , <i>dsx1FarEndIntervalSESSs</i> , <i>dsx1FarEndIntervalUASSs</i> , <i>dsx1FarEndIntervalCSSs</i> , <i>dsx1FarEndIntervalPCVs</i> , <i>dsx1FarEndIntervalBESSs</i> , <i>dsx1FarEndIntervalDMs</i>
1.3.6.1.2.1.10.18.11.1.1.dsx1FarEndIntervalIndex.dsx1FarEndIntervalNumber		
<b>dsx1FarEndIntervalIndex</b> read-only	INTEGER 1, 2	Network interface Terminal interface
1.3.6.1.2.1.10.18.11.1.2.dsx1FarEndIntervalIndex.dsx1FarEndIntervalNumber		
<b>dsx1FarEndIntervalNumber</b> read-only	INTEGER (1..96)	A number between 1 and 96, where 1 is the most recently completed 15-minute interval and 96 is the least recently completed 15-minute interval (assuming that all 96 intervals are valid).
1.3.6.1.2.1.10.18.11.1.3.dsx1FarEndIntervalIndex.dsx1FarEndIntervalNumber		
<b>dsx1FarEndIntervalESs</b> read-only	Gauge	The number of Far End Errrored Seconds encountered by a DS1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.2.1.10.18.11.1.4.dsx1FarEndIntervalIndex.dsx1FarEndIntervalNumber		
<b>dsx1FarEndIntervalSESSs</b> read-only	Gauge	The number of Far End Severely Errrored Seconds encountered by a DS1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.2.1.10.18.11.1.6.dsx1FarEndIntervalIndex.dsx1FarEndIntervalNumber		
<b>dsx1FarEndIntervalUASSs</b> read-only	Gauge	The number of Unavailable Seconds encountered by a DS1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.2.1.10.18.11.1.7.dsx1FarEndIntervalIndex.dsx1FarEndIntervalNumber		
<b>dsx1FarEndIntervalCSSs</b> read-only	Gauge	The number of Far End Controlled Slip Seconds encountered by a DS1 interface in one of the previous 96 15-minute intervals.

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.10.18.11.1.9.dsx1FarEndIntervalIndex.dsx1FarEndIntervalNumber	<b>dsx1FarEndIntervalPCVs</b>	Gauge read-only  The number of Far End Path Coding Violations reported via the far end block error count encountered by a DS1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.2.1.10.18.11.1.10.dsx1FarEndIntervalIndex.dsx1FarEndIntervalNumber	<b>dsx1FarEndIntervalBESs</b>	Gauge read-only  The number of Bursty Errrored Seconds (BESs) encountered by a DS1 interface in one of the previous 96 15-minute intervals.
1.3.6.1.2.1.10.18.11.1.11.dsx1FarEndIntervalIndex.dsx1FarEndIntervalNumber	<b>dsx1FarEndIntervalDMs</b>	Gauge read-only  The number of Degraded Minutes (DMs) encountered by a DS1 interface in one of the previous 96 15-minute intervals.

## The DS1 far end total table

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.10.18.12		
<b>dsx1FarEndTotalTable</b> not-accessible	SEQUENCE OF Dsx1FarEndTotalEntry	The DS1 Far End Total table.
1.3.6.1.2.1.10.18.12.1		
<b>dsx1FarEndTotalEntry</b> not-accessible	INDEX <i>dsx1FarEndTotalIndex</i>	An entry in the DS1 Far End Total table that consists of the following objects:  <i>dsx1FarEndTotalIndex,</i> <i>dsx1FarEndTotalESs,</i> <i>dsx1FarEndTotalSESSs,</i> <i>dsx1FarEndTotalUASs,</i> <i>dsx1FarEndTotalCSSs,</i> <i>dsx1FarEndTotalPCVs,</i> <i>dsx1FarEndTotalBESSs,</i> <i>dsx1FarEndTotalDMs</i>
1.3.6.1.2.1.10.18.12.1.1.dsx1FarEndTotalIndex		
<b>dsx1FarEndTotalIndex</b> read-only	INTEGER 1, 2	Network interface Terminal interface
1.3.6.1.2.1.10.18.12.1.2.dsx1FarEndTotalIndex		
<b>dsx1FarEndTotalESs</b> read-only	Gauge	The number of Far End Errored Seconds encountered by a DS1 interface in the previous 24-hour interval.
1.3.6.1.2.1.10.18.12.1.3.dsx1FarEndTotalIndex		
<b>dsx1FarEndTotalSESSs</b> read-only	Gauge	The number of Far End Severely Errrored Seconds encountered by a DS1 interface in the previous 24-hour interval.
1.3.6.1.2.1.10.18.12.1.5.dsx1FarEndTotalIndex		
<b>dsx1FarEndTotalUASs</b> read-only	Gauge	The number of Unavailable Seconds encountered by a DS1 interface in the previous 24-hour interval.
1.3.6.1.2.1.10.18.12.1.6.dsx1FarEndTotalIndex		
<b>dsx1FarEndTotalCSSs</b> read-only	Gauge	The number of Far End Controlled Slip Seconds encountered by a DS1 interface in the previous 24-hour interval.
1.3.6.1.2.1.10.18.12.1.8.dsx1FarEndTotalIndex		
<b>dsx1FarEndTotalPCVs</b> read-only	Gauge	The number of Far End Path Coding Violations reported via the far end block error count encountered by a DS1 interface in the previous 24-hour interval.
1.3.6.1.2.1.10.18.12.1.9.dsx1FarEndTotalIndex		
<b>dsx1FarEndTotalBESSs</b> read-only	Gauge	The number of Bursty Errrored Seconds (BESSs) encountered by a DS1 interface in the previous 24-hour interval.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.10.18.12.1.10.dsx1FarEndTotalIndex		
<b>dsx1FarEndTotalDMs</b> read-only	Gauge	The number of Degraded Minutes (DMs) encountered by a DS1 interface in the previous 24-hour interval.

## The DS1 fractional table

The *dsx1FracTable* describes the executing fractional mapping. This table is read-only. An SNMP set or get for the *dsx1FracTable* on the TI interface will result in *noSuchName* being returned.

The *dsx1FracTable* requires interfaces to be mapped to other interfaces. All interfaces are identified by *ifIndex* instance numbers. The valid instance numbers for the *dsx1FracTable* are as follows.

Interface	Instance number
IDLE	0
TI	2
Data Port 1	3

Here is an example mapping from the DataSMART command-line **TXV** command.

VIEW TABLE X OF THE FRACTIONAL T1 CONFIGURATION

MAP	RATE	TOTAL	NI CHANNELS
TI	512	17,18,19,20,21,22,23,24	
DP1	64	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,11,12,13,14	
IDLE	-	-	15,16

  

NI MAP	NI MAP						
1:DP1	2:DP1	3:DP1	4:DP1	5:DP1	6:DP1	7:DP1	8:DP1
9:DP1	10:DP1	11:DP1	12:DP1	13:DP1	14:DP1	15:IDLE	16:IDLE
17:TI	18:TI	19:TI	20:TI	21:TI	22:TI	23:TI	24:TI

The way this table looks from a MIB dump of *dsx1FracTable* is shown below.

dsx1FracIfIndex.1.1 = 3	dsx1FracIfIndex.1.2 = 3
dsx1FracIfIndex.1.3 = 3	dsx1FracIfIndex.1.4 = 3
dsx1FracIfIndex.1.5 = 3	dsx1FracIfIndex.1.6 = 3
dsx1FracIfIndex.1.7 = 3	dsx1FracIfIndex.1.8 = 3
dsx1FracIfIndex.1.9 = 3	dsx1FracIfIndex.1.10 = 3
dsx1FracIfIndex.1.11 = 3	dsx1FracIfIndex.1.12 = 3
dsx1FracIfIndex.1.13 = 3	dsx1FracIfIndex.1.14 = 3
dsx1FracIfIndex.1.15 = 0	dsx1FracIfIndex.1.16 = 0
dsx1FracIfIndex.1.17 = 2	dsx1FracIfIndex.1.18 = 2
dsx1FracIfIndex.1.19 = 2	dsx1FracIfIndex.1.20 = 2
dsx1FracIfIndex.1.21 = 2	dsx1FracIfIndex.1.22 = 2
dsx1FracIfIndex.1.23 = 2	dsx1FracIfIndex.1.24 = 2

## The DS1 fractional table

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.10.18.13		
<b>dsx1FracTable</b> not-accessible	SEQUENCE OF Dsx1FracEntry	The DS1 Fractional table.
1.3.6.1.2.1.10.18.13.1		
<b>dsx1FracEntry</b> not-accessible	INDEX <i>dsx1FracIndex</i> , <i>dsx1FracNumber</i>	An entry in the DS1 Fractional table that consists of the following objects: <i>dsx1FracIndex</i> , <i>dsx1FracNumber</i> , <i>dsx1FracIfIndex</i>
1.3.6.1.2.1.10.18.13.1.1. <i>dsx1FracIndex.dsx1FracNumber</i>		
<b>dsx1FracIndex</b> read-only	INTEGER 1 2	Network interface Terminal interface
1.3.6.1.2.1.10.18.13.1.2. <i>dsx1FracIndex.dsx1FracNumber</i>		
<b>dsx1FracNumber</b> read-only	INTEGER (1..24)	The instance number of this channel.
1.3.6.1.2.1.10.18.13.1.3. <i>dsx1FracIndex.dsx1FracNumber</i>		
<b>dsx1FracIfIndex</b> read-write	INTEGER 0 2 3	Idle Terminal interface Data port 1
		Instance number of the interface to which the NI channel is mapped.

# 6

## *MIB II — RFC 1213*

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Request For Comments (RFC) 1213 is the industry standard MIB for TCP/IP hosts. This chapter includes the following sections:

- MIB II road map
- A complete listing of the DataSMART support of MIB II

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# The MIB II road map

*SNMP MIBs are not always the easiest documents to navigate. This road map should enable you to more quickly find what you are looking for.*

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## MIB root down to *mib-2*

*iso(1)*  
*org(3)*  
*dod(6)*  
*internet(1)*  
*mgmt(2)*  
*mib-2(1)*

## The system group

See [page 179](#)

*mib-2(1)*  
**system(1)**  
  sysDescr(1)  
  sysObjectID(2)  
  sysUpTime(3)  
  sysContact(4)  
  sysName(5)  
  sysLocation(6)  
  sysServices(7)

## The interfaces group

See [page 180](#)

*interfaces(2)*  
  ifNumber(1)

### The ifTable

**ifTable(2)**  
**ifEntry(1)**  
  ifIndex(1)  
  ifDescr(2)  
  ifType(3)  
  ifMtu(4)  
  ifSpeed(5)  
  ifPhysAddress(6)  
  ifAdminStatus(7)  
  ifOperStatus(8)  
  ifLastChange(9)  
  ifInOctets(10)  
  ifInUcastPkts(11)  
  ifInNUcastPkts(12)  
  ifInDiscards(13)  
  ifInErrors(14)  
  ifInUnknownProtos(15)  
  ifOutOctets(16)  
  ifOutUcastPkts(17)  
  ifOutNUcastPkts(18)

## The address translation group

See page 185

ifOutDiscards(19)  
ifOutErrors(20)  
ifOutQLen(21)  
ifSpecific(22)

## The IP group

See page 186

### The address translation table

**at(3)**  
**atTable(1)**

**atEntry(1)**  
atIfIndex(1)  
atPhysAddress(2)  
atNetAddress(3)

### ip(4)

ipForwarding(1)  
ipDefaultTTL(2)  
ipInReceives(3)  
ipInHdrErrors(4)  
ipInAddrErrors(5)  
ipForwDatagrams(6)  
ipInUnknownProtos(7)  
ipInDiscards(8)  
ipInDelivers(9)  
ipOutRequests(10)  
ipOutDiscards(11)  
ipOutNoRoutes(12)  
ipReasmTimeout(13)  
ipReasmReqds(14)  
ipReasmOKs(15)  
ipReasmFails(16)  
ipFragOKs(17)  
ipFragFails(18)  
ipFragCreates(19)  
ipAddrTable(20)

### The IP addressing table

#### ipAddrTable(1)

**ipAddrEntry(1)**  
ipAdEntAddr(1)  
ipAdEntIfIndex(2)  
ipAdEntNetMask(3)  
ipAdEntBcastAddr(4)  
ipAdEntReasmMaxSize(5)

### The IP routing table

#### ipRouteTable(21)

**ipRouteEntry(1)**  
ipRouteDest(1)  
ipRouteIfIndex(2)  
ipRouteMetric1(3)  
ipRouteMetric2(4)

- ipRouteMetric3(5)
- ipRouteMetric4(6)
- ipRouteNextHop(7)
- ipRouteType(8)
- ipRouteProto(9)
- ipRouteAge(10)
- ipRouteMask(11)
- ipRouteMetric5(12)
- ipRouteInfo(13)

### The IP network-to-media table

#### ipNetToMediaTable(22)

- ipNetToMediaEntry(1)
  - ipNetToMediaIfIndex(1)
  - ipNetToMediaPhysAddress(2)
  - ipNetToMediaNetAddress(3)
  - ipNetToMediaType(4)
- ipRoutingDiscards(23)

## The ICMP group

See [page 192](#)

#### icmp(5)

- icmpInMsgs(1)
- icmpInErrors(2)
- icmpInDestUnreachs(3)
- icmpInTimeExcds(4)
- icmpInParmProbs(5)
- icmpInSrcQuenches(6)
- icmpInRedirects(7)
- icmpInEchos(8)
- icmpInEchoReps(9)
- icmpInTimestamps(10)
- icmpInTimestampReps(11)
- icmpInAddrMasks(12)
- icmpInAddrMaskReps(13)
- icmpOutMsgs(14)
- icmpOutErrors(15)
- icmpOutDestUnreachs(16)
- icmpOutTimeExcds(17)
- icmpOutParmProbs(18)
- icmpOutSrcQuenches(19)
- icmpOutRedirects(20)
- icmpOutEchos(21)
- icmpOutEchoReps(22)
- icmpOutTimestamps(23)
- icmpOutTimestampReps(24)
- icmpOutAddrMasks(25)
- icmpOutAddrMaskReps(26)

## The TCP group

See [page 195](#)

#### tcp(6)

- tcpRtoAlgorithm(1)
- tcpRtoMin(2)
- tcpRtoMax(3)
- tcpMaxConn(4)
- tcpActiveOpens(5)

tcpPassiveOpens(6)  
tcpAttemptFails(7)  
tcpEstabResets(8)  
tcpCurrEstab(9)  
tcpInSegs(10)  
tcpOutSegs(11)  
tcpRetransSegs(12)

### The TCP connection table

#### **tcpConnTable(13)**

##### **tcpConnEntry(1)**

tcpConnState(1)  
tcpConnLocalAddress(2)  
tcpConnLocalPort(3)  
tcpConnRemAddress(4)  
tcpConnRemPort(5)  
tcpInErrs(14)  
tcpOutRsts(15)

## **The UDP group**

See [page 198](#)

#### **udp(7)**

udpInDatagrams(1)  
udpNoPorts(2)  
udpInErrors(3)  
udpOutDatagrams(4)

### The UDP table

#### **udpTable(5)**

##### **udpEntry(1)**

udpLocalAddress(1)  
udpLocalPort(2)

## **The EGP group**

The EGP group is not supported.

## **The SNMP group**

See [page 200](#)

#### **snmp(11)**

snmpInPkts(1)  
snmpOutPkts(2)  
snmpInBadVersions(3)  
snmpInBadCommunityNames(4)  
snmpInBadCommunityUses(5)  
snmpInASNParseErrs(6)  
snmpInTooBigs(8)  
snmpInNoSuchNames(9)  
snmpInBadValues(10)  
snmpInReadOnlys(11)  
snmpInGenErrs(12)  
snmpInTotalReqVars(13)  
snmpInTotalSetVars(14)  
snmpInGetRequests(15)  
snmpInGetNexsts(16)  
snmpInSetRequests(17)  
snmpInGetResponses(18)

```
snmpInTraps(19)
snmpOutTooBigs(20)
snmpOutNoSuchNames(21)
snmpOutBadValues(22)
snmpOutGenErrs(24)
snmpOutGetRequests(25)
snmpOutGetNexts(26)
snmpOutSetRequests(27)
snmpOutGetResponses(28)
snmpOutTraps(29)
snmpEnableAuthenTraps(30)
```

# The system group

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.1.1.0		
<b>sysDescr</b> read-only	DisplayString (SIZE (0..80))	This variable contains the first line of the Main menu from the command-line interface.
1.3.6.1.2.1.1.2.0		
<b>sysObjectID</b> read-only	OBJECT IDENTIFIER 14, 15, 16, 17, 18, 19, 22, 24, 25, 26, 27	T1 DSU dual-port (1.3.6.1.4.181.14) T1 DSU add/drop dual-port (1.3.6.1.4.181.15) T1 DSU add/drop quad-port (1.3.6.1.4.181.16) E1 DSU dual-port (1.3.6.1.4.181.17) E1 DSU add/drop dual-port (1.3.6.1.4.181.18) E1 DSU add/drop quad-port (1.3.6.1.4.181.19) SPort 555 plug-in (1.3.6.1.4.181.22) SPort 556 plug-in (1.3.6.1.4.181.24) DSU/CSU standard (1.3.6.1.4.181.1.25) DSU/CSU w/ FRIB (1.3.6.1.4.181.1.26) CSU w/ Extended Temperature Range (1.3.6.1.4.181.1.27)
		Identifies the specific product type in the DataSMART family.
1.3.6.1.2.1.1.3.0		
<b>sysUpTime</b> read-only	TimeTicks	How long this unit has been powered, in hundredths of a second.
1.3.6.1.2.1.1.4.0		
<b>sysContact</b> read-write	DisplayString (SIZE (0..128))	The system administrator for this unit. The default is NULL.
1.3.6.1.2.1.1.5.0		
<b>sysName</b> read-write	DisplayString (SIZE (0..15))	The name of this unit. The default is the same string as the command-line SN command.
1.3.6.1.2.1.1.6.0		
<b>sysLocation</b> read-write	DisplayString (SIZE (0..128))	The location of this unit. The default is NULL.
1.3.6.1.2.1.1.7.0		
<b>sysServices</b> read-only	INTEGER 2	The networking level at which this equipment operates. A DataSMART unit corresponds to layer 2, the data link/subnetwork layer.

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## The interfaces group

---

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.2.1.0 <b><i>ifNumber</i></b> read-only	INTEGER	The number of network interfaces (regardless of their current state) present on this system.

---

### The ifTable

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.2.2 <b><i>ifTable</i></b> not-accessible	SEQUENCE OF IfEntry	A list of interface entries. The number of entries is given by the value of <i>ifNumber</i> .
1.3.6.1.2.1.2.2.1 <b><i>ifEntry</i></b> not-accessible	INDEX <i>ifIndex</i>	An entry in the ifTable that consists of the following objects: <i>ifIndex</i> , <i>ifDescr</i> , <i>ifType</i> , <i>ifMtu</i> , <i>ifSpeed</i> , <i>ifPhysAddress</i> , <i>ifAdminStatus</i> , <i>ifOperStatus</i> , <i>ifLastChange</i> , <i>ifInOctets</i> , <i>ifInUcastPkts</i> , <i>ifInNUcastPkts</i> , <i>ifInDiscards</i> , <i>ifInErrors</i> , <i>ifInUnknownProtos</i> , <i>ifOutOctets</i> , <i>ifOutUcastPkts</i> , <i>ifOutNUcastPkts</i> , <i>ifOutDiscards</i> , <i>ifOutErrors</i> , <i>ifOutQLen</i> , <i>ifSpecific</i>

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<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.2.2.1.1. <i>ifIndex</i>		
<b><i>ifIndex</i></b> read-only	INTEGER 1 2 3 4 5 6 7 8	Network interface Terminal interface Data Port 1 SLIP Ethernet PPP INBAND DL
1.3.6.1.2.1.2.2.1.2. <i>ifIndex</i>		
<b><i>ifDescr</i></b> read-only	DisplayString (SIZE (0..255))	The description of the interface. NI = “T1 or E1 Network Interface” TI = “T1 or E1 Terminal Interface” Data Port 1 = “Data Port 1..4 Interface” SLIP = “SLIP07” Ethernet = “ether08” PPP = “ppp3” INBAND = “frame-relay” DL = “dl7”
1.3.6.1.2.1.2.2.1.3. <i>ifIndex</i>		
<b><i>ifType</i></b> read-only	INTEGER <i>ethernet-csmacd</i> (6), <i>sdlc</i> (17), <i>ds1</i> (18), <i>e1</i> (19), <i>dl</i> (22), <i>ppp</i> (23), <i>slip</i> (28), <i>v35</i> (45)	The possible values for this MIB object are specified in the <i>IANAifType</i> definition from RFC 1573. NI = <i>dsI</i> (18) TI = <i>dsI</i> (18) Data Port 1 = <i>v35</i> (45) PPP = <i>ppp</i> (23) SLIP = <i>slip</i> (28) Ethernet = <i>ethernetCsmacd</i> (6) DL = <i>propPointToPointSerial</i> (22)
1.3.6.1.2.1.2.2.1.4. <i>ifIndex</i>		
<b><i>ifMtu</i></b> read-only	INTEGER	The maximum datagram that can be sent/received on the interface. This applies only to Ethernet and SLIP. All other interfaces return zero.
1.3.6.1.2.1.2.2.1.5. <i>ifIndex</i>		
<b><i>ifSpeed</i></b> read-only	Gauge	The bandwidth the interface is configured for, in bits/second. NI = 1544000 TI = 1544000 Data Port = # of channels times data rate SLIP = speed of control port Ethernet = 10000000
1.3.6.1.2.1.2.2.1.6. <i>ifIndex</i>		
<b><i>ifPhysAddress</i></b> read-only	PhysAddress	The physical address of the interface. This object applies only to the Ethernet interface, as it is the only one that has a physical interface.

OID, Name, Access	Syntax	Description	
1.3.6.1.2.1.2.2.1.7.ifIndex			
<b>ifAdminStatus</b> read-write	INTEGER <i>up(1), down(2)</i>	DS1	The administrative status of the interface. <ul style="list-style-type: none"><li>• <i>down</i> if the TI interface on an add/drop has no channels assigned.</li><li>• <i>up</i> if TI interface on an add/drop has channels assigned. The NI interface is always <i>up</i>.</li></ul>
		Data port	<ul style="list-style-type: none"><li>• <i>down</i> if no channels are assigned.</li><li>• <i>up</i> if channels are assigned.</li></ul>
		SLIP	<ul style="list-style-type: none"><li>• <i>down</i> if Ethernet is being used for the IP network interface, or if there is no IP network interface.</li><li>• <i>up</i> if SLIP is being used for the IP network interface.</li></ul>
		Ethernet	<ul style="list-style-type: none"><li>• <i>down</i> if SLIP is being used for the IP network interface, or if there is no IP network interface.</li><li>• <i>up</i> if Ethernet is being used for the IP network interface.</li></ul>
1.3.6.1.2.1.2.2.1.8.ifIndex			
<b>ifOperStatus</b> read-only	INTEGER <i>up(1), down(2), testing(3),</i>	DS1	The operational status of the interface. If the administrative status goes to down, operational status goes to down. <ul style="list-style-type: none"><li>• <i>down</i> if the interface is not in service. This could happen due to a loss of signal or some other alarm condition.</li><li>• <i>testing</i> if a loopback is being performed or a test code is being sent.</li><li>• <i>up</i> otherwise.</li></ul>
		Data port	<ul style="list-style-type: none"><li>• <i>down</i> if the interface is not in service.</li><li>• <i>testing</i> if a loopback is being performed.</li><li>• <i>up</i> otherwise.</li></ul>
		SLIP	<ul style="list-style-type: none"><li>• <i>down</i> if the cable is removed from the control port.</li><li>• <i>up</i> if the cable is attached to the control port.</li></ul>
		Ethernet	<ul style="list-style-type: none"><li>• <i>down</i> if the Ethernet adapter card is not in the PCMCIA slot.</li><li>• <i>up</i> if the card is in the slot.</li></ul>
1.3.6.1.2.1.2.2.1.9.ifIndex			
<b>ifLastChange</b> read-only	TimeTicks	The value of <i>sysUpTime</i> at the time the interface entered its current operational state.	
1.3.6.1.2.1.2.2.1.10.ifIndex			
<b>ifInOctets</b> read-only	Counter	The number of octets received on the interface, including framing errors.  This applies only to the Ethernet interface.	

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.2.2.1.11. <i>ifIndex</i>		
<b><i>ifInUcastPkts</i></b> read-only	Counter	The number of subnetwork-unicast packets delivered to a higher-layer protocol.
		This applies only to the Ethernet interface.
1.3.6.1.2.1.2.2.1.12. <i>ifIndex</i>		
<b><i>ifInNUcastPkts</i></b> read-only	Counter	The number of non-unicast (i.e., subnetwork-broadcast or subnetwork-multicast) packets delivered to a higher-layer protocol.
		This applies only to the Ethernet interface.
1.3.6.1.2.1.2.2.1.13. <i>ifIndex</i>		
<b><i>ifInDiscards</i></b> read-only	Counter	The number of inbound packets that were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space.
		This applies only to the Ethernet interface.
1.3.6.1.2.1.2.2.1.14. <i>ifIndex</i>		
<b><i>ifInErrors</i></b> read-only	Counter	The number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol.
		This applies only to the Ethernet interface.
1.3.6.1.2.1.2.2.1.15. <i>ifIndex</i>		
<b><i>ifInUnknownProtos</i></b> read-only	Counter	The number of packets received via the interface that were discarded because of an unknown or unsupported protocol.
		This applies only to the Ethernet interface.
1.3.6.1.2.1.2.2.1.16. <i>ifIndex</i>		
<b><i>ifOutOctets</i></b> read-only	Counter	The total number of octets transmitted out of the interface, including framing characters.
		This applies only to the Ethernet interface.
1.3.6.1.2.1.2.2.1.17. <i>ifIndex</i>		
<b><i>ifOutUcastPkts</i></b> read-only	Counter	The total number of packets that higher-level protocols requested be transmitted to a subnetwork-unicast address, including those that were discarded or not sent.
		This applies only to the Ethernet interface.
1.3.6.1.2.1.2.2.1.18. <i>ifIndex</i>		
<b><i>ifOutNUcastPkts</i></b> read-only	Counter	The total number of packets that higher-level protocols requested be transmitted to a non-unicast (i.e., a subnetwork-broadcast or subnetwork-multicast) address, including those that were discarded or not sent.
		This applies only to the Ethernet interface.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.2.2.1.19. <i>ifIndex</i>		
<b><i>ifOutDiscards</i></b> read-only	Counter	The number of outbound packets that were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space.  This applies only to the Ethernet interface.
1.3.6.1.2.1.2.2.1.20. <i>ifIndex</i>		
<b><i>ifOutErrors</i></b> read-only	Counter	The number of outbound packets that could not be transmitted because of errors.  This applies only to the Ethernet interface.
1.3.6.1.2.1.2.2.1.21. <i>ifIndex</i>		
<b><i>ifOutQLen</i></b> read-only	Gauge	The length of the output packet queue (in packets).  This applies only to the Ethernet interface.
1.3.6.1.2.1.2.2.1.22. <i>ifIndex</i>		
<b><i>ifSpecific</i></b> read-only	OBJECT IDENTIFIER	For the DS1 or E1 interfaces, this object will contain the <i>dsx1LineStatus</i> for that interface.

---

# The address translation group

## The address translation table

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.3.1		
<b>atTable</b> not-accessible	SEQUENCE OF AtEntry	The Address Translation tables.
1.3.6.1.2.1.3.1.1		
<b>atEntry</b> not-accessible	INDEX <i>atIfIndex</i> , <i>atNetAddress</i>	An entry in the Address Translation table that consists of the following objects:  <i>atIfIndex</i> , <i>atPhysAddress</i> , <i>atNetAddress</i>
1.3.6.1.2.1.3.1.1.1. <i>atIfIndex.atNetAddress</i>		
<b>atIfIndex</b> read-write	INTEGER	The <i>ifIndex</i> for which this table is active.  This applies only to the Ethernet interface.
1.3.6.1.2.1.3.1.1.2. <i>atIfIndex.atNetAddress</i>		
<b>atPhysAddress</b> read-write	PhysAddress	The network corresponding with the physical address of a network host.
1.3.6.1.2.1.3.1.1.3. <i>atIfIndex.atNetAddress</i>		
<b>atNetAddress</b> read-write	NetworkAddress	The physical address of an IP network host.

## The IP group

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.4.1.0		
<b><i>ipForwarding</i></b> read-write	INTEGER <i>forwarding(1), not-forwarding(2)</i>	DataSMART units do not forward IP datagrams. That is the function of a gateway.
1.3.6.1.2.1.4.2.0		
<b><i>ipDefaultTTL</i></b> read-write	INTEGER	The default value inserted into the time-to-live field of the IP header of datagrams originated at this unit, whenever a TTL value is not supplied by the transport layer protocol.
1.3.6.1.2.1.4.3.0		
<b><i>ipInReceives</i></b> read-only	Counter	The total number of input datagrams received from interfaces, including those received in error.
1.3.6.1.2.1.4.4.0		
<b><i>ipInHdrErrors</i></b> read-only	Counter	The number of input datagrams discarded due to errors in their IP headers, including bad checksums, version number mismatch, other format errors, time-to-live exceeded, errors discovered in processing their IP options, etc.
1.3.6.1.2.1.4.5.0		
<b><i>ipInAddrErrors</i></b> read-only	Counter	The number of input datagrams discarded because the IP address in their IP header's destination field was not a valid address to be received at this unit.
1.3.6.1.2.1.4.6.0		
<b><i>ipForwDatagrams</i></b> read-only	Counter	The number of input datagrams for which this unit was not their final IP destination, as a result of which an attempt was made to find a route to forward them to that final destination.
1.3.6.1.2.1.4.7.0		
<b><i>ipInUnknownProtos</i></b> read-only	Counter	The number of locally-addressed datagrams received successfully but discarded because of an unknown or unsupported protocol.
1.3.6.1.2.1.4.8.0		
<b><i>ipInDiscards</i></b> read-only	Counter	The number of input IP datagrams for which no problems were encountered to prevent their continued processing, but which were discarded.
1.3.6.1.2.1.4.9.0		
<b><i>ipInDelivers</i></b> read-only	Counter	The total number of input datagrams successfully delivered to IP user-protocols (including ICMP).
1.3.6.1.2.1.4.10.0		
<b><i>ipOutRequests</i></b> read-only	Counter	The total number of IP datagrams that local IP user-protocols (including ICMP) supplied to IP in requests for transmission.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.4.11.0		
<b><i>ipOutDiscards</i></b> read-only	Counter	The number of output IP datagrams for which no problem was encountered to prevent their transmission to their destination, but which were discarded.
1.3.6.1.2.1.4.12.0		
<b><i>ipOutNoRoutes</i></b> read-only	Counter	The number of IP datagrams discarded because no route could be found to transmit them to their destination.
1.3.6.1.2.1.4.13.0		
<b><i>ipReasmTimeout</i></b> read-only	INTEGER	The maximum number of seconds that received fragments are held while they are awaiting reassembly at this entity.
1.3.6.1.2.1.4.14.0		
<b><i>ipReasmReqds</i></b> read-only	Counter	The number of IP fragments received that needed to be reassembled at this entity.
1.3.6.1.2.1.4.15.0		
<b><i>ipReasmOKs</i></b> read-only	Counter	The number of IP datagrams successfully reassembled.
1.3.6.1.2.1.4.16.0		
<b><i>ipReasmFails</i></b> read-only	Counter	The number of failures detected by the IP reassembly algorithm.
1.3.6.1.2.1.4.17.0		
<b><i>ipFragOKs</i></b> read-only	Counter	The number of IP datagrams that have been successfully fragmented at this unit.
1.3.6.1.2.1.4.18.0		
<b><i>ipFragFails</i></b> read-only	Counter	The number of IP datagrams that have been discarded because they needed to be fragmented at this unit but could not be.
1.3.6.1.2.1.4.19.0		
<b><i>ipFragCreates</i></b> read-only	Counter	The number of IP datagram fragments that have been generated as a result of fragmentation at this unit.

## The IP addressing table

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.4.20		
<b><i>ipAddrTable</i></b> not-accessible	SEQUENCE OF IpAddrEntry	The table of addressing information relevant to this entity's IP addresses.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.4.20.1		
<b><i>ipAddrEntry</i></b> not-accessible	INDEX <i>ipAdEntAddr</i>	An entry in the IP Addressing table that consists of the following objects: <i>ipAdEntAddr</i> , <i>ipAdEntIfIndex</i> , <i>ipAdEntNetMask</i> , <i>ipAdEntBcastAddr</i> , <i>ipAdEntReasmMaxSize</i>
1.3.6.1.2.1.4.20.1.1. <i>ipAdEntAddr</i>		
<b><i>ipAdEntAddr</i></b> read-only	IpAddress	The IP address to which this entry's addressing information pertains.
1.3.6.1.2.1.4.20.1.2. <i>ipAdEntAddr</i>		
<b><i>ipAdEntIfIndex</i></b> read-only	INTEGER	The index value that uniquely identifies the interface to which this entry is applicable. This is the same as <i>ifIndex</i> .
1.3.6.1.2.1.4.20.1.3. <i>ipAdEntAddr</i>		
<b><i>ipAdEntNetMask</i></b> read-only	IpAddress	The subnet mask associated with the IP address of this entry. The value of the mask is an IP address with all the network bits set to 1 and all the host bits set to 0.
1.3.6.1.2.1.4.20.1.4. <i>ipAdEntAddr</i>		
<b><i>ipAdEntBcastAddr</i></b> read-only	INTEGER	The value of the least-significant bit in the IP broadcast address used for sending datagrams on the (logical) interface associated with the IP address of this entry.
1.3.6.1.2.1.4.20.1.5. <i>ipAdEntAddr</i>		
<b><i>ipAdEntReasmMaxSize</i></b> read-only	INTEGER (0..65535)	The size of the largest IP datagram that this unit can reassemble from incoming IP fragmented datagrams received on this interface.

## The IP routing table

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.4.21		
<b><i>ipRouteTable</i></b> not-accessible	SEQUENCE OF IpRouteEntry	This entity's IP Routing table.

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.4.21.1		
<b>ipRouteEntry</b> not-accessible	INDEX <i>ipRouteDest</i>	An entry in the IP Routing table that consists of the following objects:
		<i>ipRouteDest</i> , <i>ipRouteIfIndex</i> , <i>ipRouteMetric1</i> , <i>ipRouteMetric2</i> , <i>ipRouteMetric3</i> , <i>ipRouteMetric4</i> , <i>ipRouteNextHop</i> , <i>ipRouteType</i> , <i>ipRouteProto</i> , <i>ipRouteAge</i> , <i>ipRouteMask</i> , <i>ipRouteMetric5</i> , <i>ipRouteInfo</i>
1.3.6.1.2.1.4.21.1.1. <i>ipRouteDest</i>		
<b>ipRouteDest</b> read-write	IpAddress	The destination IP address of this route. An entry with a value of 0.0.0.0 is considered a default route. Multiple routes to a single destination can appear in the table, but access to such multiple entries is dependent on the table-access mechanisms defined by the network management protocol in use.
1.3.6.1.2.1.4.21.1.2. <i>ipRouteDest</i>		
<b>ipRouteIfIndex</b> read-write	INTEGER	This is used internally. Since <i>ipRouteProto</i> is set to <i>local</i> , this object does not specify distances via the next hop.
1.3.6.1.2.1.4.21.1.3. <i>ipRouteDest</i>		
<b>ipRouteMetric1</b> read-write	INTEGER	The index value that uniquely identifies the local interface through which the next hop of this route should be reached. This is the same as the <i>ifIndex</i> .
1.3.6.1.2.1.4.21.1.4. <i>ipRouteDest</i>		
<b>ipRouteMetric2</b> read-write	INTEGER	Not used.
1.3.6.1.2.1.4.21.1.5. <i>ipRouteDest</i>		
<b>ipRouteMetric3</b> read-write	INTEGER	Not used.
1.3.6.1.2.1.4.21.1.6. <i>ipRouteDest</i>		
<b>ipRouteMetric4</b> read-write	INTEGER	Not used.
1.3.6.1.2.1.4.21.1.7. <i>ipRouteDest</i>		
<b>ipRouteNextHop</b> read-write	IpAddress	The IP address of the next hop of this route.

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.4.21.1.8. <i>ipRouteDest</i>		
<b><i>ipRouteType</i></b> read-write	INTEGER <i>other(1), invalid(2), direct(3), indirect(4)</i>	The type of route.
1.3.6.1.2.1.4.21.1.9. <i>ipRouteDest</i>		
<b><i>ipRouteProto</i></b> read-only	INTEGER <i>other(1), local(2), netmgmt(3), icmp(4)</i>	The routing mechanism via which this route was learned.
1.3.6.1.2.1.4.21.1.10. <i>ipRouteDest</i>		
<b><i>ipRouteAge</i></b> read-write	INTEGER	The number of seconds since this route was last updated or otherwise determined to be correct.
1.3.6.1.2.1.4.21.1.11. <i>ipRouteDest</i>		
<b><i>ipRouteMask</i></b> read-write	IpAddress	Indicate the mask to be logically ANDed with the destination address before being compared to the value in the <i>ipRouteDest</i> field.
1.3.6.1.2.1.4.21.1.12. <i>ipRouteDest</i>		
<b><i>ipRouteMetric5</i></b> read-write	INTEGER	Not supported.
1.3.6.1.2.1.4.21.1.13. <i>ipRouteDest</i>		
<b><i>ipRouteInfo</i></b> read-only	OBJECT IDENTIFIER	A reference to MIB definitions specific to the particular routing protocol that is responsible for this route, as determined by the value specified in the route's <i>ipRouteProto</i> value.

## The IP network-to-media table

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.4.22		
<b><i>ipNetToMediaTable</i></b> not-accessible	SEQUENCE OF <i>IpNetToMediaEntry</i>	The IP Address Translation table used for mapping from IP addresses to physical addresses.
1.3.6.1.2.1.4.22.1		
<b><i>ipNetToMediaEntry</i></b> not-accessible	INDEX <i>ipNetToMediaIfIndex, ipNetToMediaNetAddress</i>	An entry in the IP Address Translation table that consists of the following objects: <i>ipNetToMediaIfIndex, ipNetToMediaPhysAddress, ipNetToMediaNetAddress, ipNetToMediaType</i>

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.4.22.1.1. <i>ipNetToMediaIfIndex.ipNetToMediaNetAddress</i>		
<b><i>ipNetToMediaIfIndex</i></b> read-write	INTEGER	The interface on which this entry's equivalence is effective. This is the same as the <i>ifIndex</i> .
1.3.6.1.2.1.4.22.1.2. <i>ipNetToMediaIfIndex.ipNetToMediaNetAddress</i>		
<b><i>ipNetToMediaPhysAddress</i></b> read-write	PhysAddress	The media-dependent “physical” address.
1.3.6.1.2.1.4.22.1.3. <i>ipNetToMediaIfIndex.ipNetToMediaNetAddress</i>		
<b><i>ipNetToMediaNetAddress</i></b> read-write	IpAddress	The IP address corresponding to the media-dependent “physical” address.
1.3.6.1.2.1.4.22.1.4. <i>ipNetToMediaIfIndex.ipNetToMediaNetAddress</i>		
<b><i>ipNetToMediaType</i></b> read-write	INTEGER <i>other(1), invalid(2), dynamic(3), static(4)</i>	The type of mapping. Setting this value to <i>invalid</i> has the effect of invalidating the corresponding entry in the <i>ipNetToMediaTable</i> .

## The IP group (cont)

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.4.23.0		
<b><i>ipRoutingDiscards</i></b> read-only	Counter	The number of entries that were chosen to be discarded even though they are valid.

---

## The ICMP group

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OID, Name, Access	Syntax	Description
1.3.6.1.2.1.5.1.0		
<b><i>icmpInMsgs</i></b> read-only	Counter	The total number of ICMP messages that the unit received. Note that this counter includes all those messages counted by <i>icmpInErrors</i> .
1.3.6.1.2.1.5.2.0		
<b><i>icmpInErrors</i></b> read-only	Counter	The number of ICMP messages that the unit received but determined as having ICMP-specific errors.
1.3.6.1.2.1.5.3.0		
<b><i>icmpInDestUnreachs</i></b> read-only	Counter	The number of ICMP Destination Unreachable messages received.
1.3.6.1.2.1.5.4.0		
<b><i>icmpInTimeExcds</i></b> read-only	Counter	The number of ICMP Time Exceeded messages received.
1.3.6.1.2.1.5.5.0		
<b><i>icmpInParmProbs</i></b> read-only	Counter	The number of ICMP Parameter Problem messages received.
1.3.6.1.2.1.5.6.0		
<b><i>icmpInSrcQuenches</i></b> read-only	Counter	The number of ICMP Source Quench messages received.
1.3.6.1.2.1.5.7.0		
<b><i>icmpInRedirects</i></b> read-only	Counter	The number of ICMP Redirect messages received.
1.3.6.1.2.1.5.8.0		
<b><i>icmpInEchos</i></b> read-only	Counter	The number of ICMP Echo (request) messages received.
1.3.6.1.2.1.5.9.0		
<b><i>icmpInEchoReps</i></b> read-only	Counter	The number of ICMP Echo Reply messages received.
1.3.6.1.2.1.5.10.0		
<b><i>icmpInTimestamps</i></b> read-only	Counter	The number of ICMP Timestamp (request) messages received.
1.3.6.1.2.1.5.11.0		
<b><i>icmpInTimestampReps</i></b> read-only	Counter	The number of ICMP Timestamp Reply messages received.
1.3.6.1.2.1.5.12.0		
<b><i>icmpInAddrMasks</i></b> read-only	Counter	The number of ICMP Address Mask Request messages received.

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OID, Name, Access	Syntax	Description
1.3.6.1.2.1.5.13.0		
<b><i>icmpInAddrMaskReps</i></b> read-only	Counter	The number of ICMP Address Mask Reply messages received.
1.3.6.1.2.1.5.14.0		
<b><i>icmpOutMsgs</i></b> read-only	Counter	The total number of ICMP messages that this unit attempted to send. Note that this counter includes all those messages counted by <i>icmpOutErrors</i> .
1.3.6.1.2.1.5.15.0		
<b><i>icmpOutErrors</i></b> read-only	Counter	The number of ICMP messages that this unit did not send due to problems discovered within ICMP, such as lack of buffers.
1.3.6.1.2.1.5.16.0		
<b><i>icmpOutDestUnreachs</i></b> read-only	Counter	The number of ICMP Destination Unreachable messages sent.
1.3.6.1.2.1.5.17.0		
<b><i>icmpOutTimeExcds</i></b> read-only	Counter	The number of ICMP Time Exceeded messages sent.
1.3.6.1.2.1.5.18.0		
<b><i>icmpOutParmProbs</i></b> read-only	Counter	The number of ICMP Parameter Problem messages sent.
1.3.6.1.2.1.5.19.0		
<b><i>icmpOutSrcQuenches</i></b> read-only	Counter	The number of ICMP Source Quench messages sent.
1.3.6.1.2.1.5.20.0		
<b><i>icmpOutRedirects</i></b> read-only	Counter	The number of ICMP Redirect messages sent. For a host, this object will always be zero, since hosts do not send redirects.
1.3.6.1.2.1.5.21.0		
<b><i>icmpOutEchos</i></b> read-only	Counter	The number of ICMP Echo (request) messages sent.
1.3.6.1.2.1.5.22.0		
<b><i>icmpOutEchoReps</i></b> read-only	Counter	The number of ICMP Echo Reply messages sent.
1.3.6.1.2.1.5.23.0		
<b><i>icmpOutTimestamps</i></b> read-only	Counter	The number of ICMP Timestamp (request) messages sent.
1.3.6.1.2.1.5.24.0		
<b><i>icmpOutTimestampReps</i></b> read-only	Counter	The number of ICMP Timestamp Reply messages sent.
1.3.6.1.2.1.5.25.0		
<b><i>icmpOutAddrMasks</i></b> read-only	Counter	The number of ICMP Address Mask Request messages sent.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.5.26.0 <i>icmpOutAddrMaskReps</i> read-only	Counter	The number of ICMP Address Mask Reply messages sent.

## The TCP group

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.6.1.0		
<b>tcpRtoAlgorithm</b> read-only	INTEGER <i>other(1), constant(2), rsre(3), vanj(4)</i>	The algorithm used to determine the time-out value used for retransmitting unacknowledged octets.
1.3.6.1.2.1.6.2.0		
<b>tcpRtoMin</b> read-only	INTEGER	The minimum value permitted by a TCP implementation for the retransmission time-out, measured in milliseconds.
1.3.6.1.2.1.6.3.0		
<b>tcpRtoMax</b> read-only	INTEGER	The maximum value permitted by a TCP implementation for the retransmission time-out, measured in milliseconds.
1.3.6.1.2.1.6.4.0		
<b>tcpMaxConn</b> read-only	INTEGER	The limit on the total number of TCP connections the unit can support.
1.3.6.1.2.1.6.5.0		
<b>tcpActiveOpens</b> read-only	Counter	The number of times TCP connections have made a direct transition to the SYN-SENT state from the CLOSED state.
1.3.6.1.2.1.6.6.0		
<b>tcpPassiveOpens</b> read-only	Counter	The number of times TCP connections have made a direct transition to the SYN-RCVD state from the LISTEN state.
1.3.6.1.2.1.6.7.0		
<b>tcpAttemptFails</b> read-only	Counter	The number of times TCP connections have made a direct transition to the CLOSED state from either the SYN-SENT state or the SYN-RCVD state, plus the number of times TCP connections have made a direct transition to the LISTEN state from the SYN-RCVD state.
1.3.6.1.2.1.6.8.0		
<b>tcpEstabResets</b> read-only	Counter	The number of times TCP connections have made a direct transition to the CLOSED state from either the ESTABLISHED state or the CLOSE-WAIT state.
1.3.6.1.2.1.6.9.0		
<b>tcpCurrEstab</b> read-only	Gauge	The number of TCP connections for which the current state is either ESTABLISHED or CLOSE-WAIT.
1.3.6.1.2.1.6.10.0		
<b>tcpInSegs</b> read-only	Counter	The total number of segments received, including those received in error. This count includes segments received on currently established connections.

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.6.11.0		
<b>tcpOutSegs</b> read-only	Counter	The total number of segments sent, including those on current connections but excluding those containing only retransmitted octets.

  

1.3.6.1.2.1.6.12.0		
<b>tcpRetransSegs</b> read-only	Counter	The total number of segments retransmitted - that is, the number of TCP segments transmitted containing one or more previously transmitted octets.

## The TCP connections table

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.6.13		
<b>tcpConnTable</b> not-accessible	SEQUENCE OF TcpConnEntry	A table containing TCP connection-specific information.
1.3.6.1.2.1.6.13.1		
<b>tcpConnEntry</b> not-accessible	INDEX  <i>tcpConnLocalAddress</i> , <i>tcpConnLocalPort</i> , <i>tcpConnRemAddress</i> , <i>tcpConnRemPort</i>	An entry in the TCP Connections table that consists of the following objects:  <i>tcpConnState</i> , <i>tcpConnLocalAddress</i> , <i>tcpConnLocalPort</i> , <i>tcpConnRemAddress</i> , <i>tcpConnRemPort</i>
1.3.6.1.2.1.6.13.1.1. <i>tcpConnLocalAddress</i> . <i>tcpConnLocalPort</i> . <i>tcpConnRemAddress</i> . <i>tcpConnRemPort</i>		
<b>tcpConnState</b> read-write	INTEGER  <i>closed</i> (1), <i>listen</i> (2), <i>synSent</i> (3), <i>synReceived</i> (4), <i>established</i> (5), <i>finWait1</i> (6), <i>finWait2</i> (7), <i>closeWait</i> (8), <i>lastAck</i> (9), <i>closing</i> (10), <i>timeWait</i> (11), <i>deleteTCB</i> (12)	The state of this TCP connection. The only value that may be set by a management station is <i>deleteTCB</i> .
1.3.6.1.2.1.6.13.1.2. <i>tcpConnLocalAddress</i> . <i>tcpConnLocalPort</i> . <i>tcpConnRemAddress</i> . <i>tcpConnRemPort</i>		
<b>tcpConnLocalAddress</b> read-only	IpAddress	The local IP address for this TCP connection.
1.3.6.1.2.1.6.13.1.3. <i>tcpConnLocalAddress</i> . <i>tcpConnLocalPort</i> . <i>tcpConnRemAddress</i> . <i>tcpConnRemPort</i>		
<b>tcpConnLocalPort</b> read-only	INTEGER (0..65535)	The local port number for this TCP connection.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.6.13.1.4. <i>tcpConnLocalAddress.tcpConnLocalPort.tcpConnRemAddress.tcpConnRemPort</i>		
<b><i>tcpConnRemAddress</i></b> read-only	IpAddress	The remote IP address for this TCP connection.

  

1.3.6.1.2.1.6.13.1.5. <i>tcpConnLocalAddress.tcpConnLocalPort.tcpConnRemAddress.tcpConnRemPort</i>		
<b><i>tcpConnRemPort</i></b> read-only	INTEGER (0..65535)	The remote port number for this TCP connection.

## The TCP group (cont)

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.6.14.0		
<b><i>tcpInErrs</i></b> read-only	Counter	The total number of segments received in error (e.g., bad TCP checksums).
1.3.6.1.2.1.6.15.0		
<b><i>tcpOutRsts</i></b> read-only	Counter	The number of TCP segments sent containing the RST flag.

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## The UDP group

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OID, Name, Access	Syntax	Description
1.3.6.1.2.1.7.1.0		
<b><i>udpInDatagrams</i></b> read-only	Counter	The total number of UDP datagrams delivered to UDP users.
1.3.6.1.2.1.7.2.0		
<b><i>udpNoPorts</i></b> read-only	Counter	The total number of received UDP datagrams for which there was no application at the destination port.
1.3.6.1.2.1.7.3.0		
<b><i>udpInErrors</i></b> read-only	Counter	The number of received UDP datagrams that could not be delivered for reasons other than the lack of an application at the destination port.
1.3.6.1.2.1.7.4.0		
<b><i>udpOutDatagrams</i></b> read-only	Counter	The total number of UDP datagrams sent from this entity.

---

## The UDP listener table

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.7.5		
<b><i>udpTable</i></b> not-accessible	SEQUENCE OF UdpEntry	A table containing UDP listener information.
1.3.6.1.2.1.7.5.1		
<b><i>udpEntry</i></b> not-accessible	INDEX <i>udpLocalAddress</i> , <i>udpLocalPort</i>	An entry in the UDP listener table that consists of the following objects:  <i>udpLocalAddress</i> , <i>udpLocalPort</i>
1.3.6.1.2.1.7.5.1.1. <i>udpLocalAddress.udpLocalPort</i>		
<b><i>udpLocalAddress</i></b> read-only	IpAddress	The local IP address for this UDP listener.
1.3.6.1.2.1.7.5.1.2. <i>udpLocalAddress.udpLocalPort</i>		
<b><i>udpLocalPort</i></b> read-only	INTEGER (0..65535)	The local port number for this UDP listener.

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## The EGP group

The EGP group is not supported.

## The SNMP group

OID, Name, Access	Syntax	Description
1.3.6.1.2.1.11.1.0		
<b>snmpInPkts</b> read-only	Counter	The total number of SNMP Messages delivered to the unit from the transport service.
1.3.6.1.2.1.11.2.0		
<b>snmpOutPkts</b> read-only	Counter	The total number of SNMP Messages that were passed from the unit to the transport service.
1.3.6.1.2.1.11.3.0		
<b>snmpInBadVersions</b> read-only	Counter	The total number of SNMP Messages that were delivered to the unit and were for an unsupported SNMP version.
1.3.6.1.2.1.11.4.0		
<b>snmpInBadCommunityNames</b> read-only	Counter	The total number of SNMP Messages delivered to the unit that used a SNMP community name not known to the unit.
1.3.6.1.2.1.11.5.0		
<b>snmpInBadCommunityUses</b> read-only	Counter	The total number of SNMP Messages delivered to the unit that represented an SNMP operation which was not allowed by the SNMP community named in the Message.
1.3.6.1.2.1.11.6.0		
<b>snmpInASNParseErrs</b> read-only	Counter	The total number of ASN.1 or BER errors encountered by the unit when decoding received SNMP Messages.
1.3.6.1.2.1.11.8.0		
<b>snmpInTooBigs</b> read-only	Counter	The total number of SNMP PDUs which were delivered to the unit and for which the value of the error-status field is <i>tooBig</i> .
1.3.6.1.2.1.11.9.0		
<b>snmpInNoSuchNames</b> read-only	Counter	The total number of SNMP PDUs which were delivered to the unit and for which the value of the error-status field is <i>noSuchName</i> .
1.3.6.1.2.1.11.10.0		
<b>snmpInBadValues</b> read-only	Counter	The total number of SNMP PDUs which were delivered to the unit and for which the value of the error-status field is <i>badValue</i> .
1.3.6.1.2.1.11.11.0		
<b>snmpInReadOnlys</b> read-only	Counter	The total number of valid SNMP PDUs which were delivered to the unit and for which the value of the error-status field is <i>readOnly</i> .
1.3.6.1.2.1.11.12.0		
<b>snmpInGenErrs</b> read-only	Counter	The total number of SNMP PDUs which were delivered to the unit and for which the value of the error-status field is <i>genErr</i> .
1.3.6.1.2.1.11.13.0		
<b>snmpInTotalReqVars</b> read-only	Counter	The total number of MIB objects which have been retrieved successfully by the unit as the result of receiving valid SNMP Get-Request and Get-Next PDUs.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.11.14.0		
<b><i>snmpInTotalSetVars</i></b> read-only	Counter	The total number of MIB objects that have been altered successfully by the unit as the result of receiving valid SNMP Set-Request PDUs.
1.3.6.1.2.1.11.15.0		
<b><i>snmpInGetRequests</i></b> read-only	Counter	The total number of SNMP Get-Request PDUs that have been accepted and processed by the unit.
1.3.6.1.2.1.11.16.0		
<b><i>snmpInGetNxts</i></b> read-only	Counter	The total number of SNMP Get-Next PDUs that have been accepted and processed by the unit.
1.3.6.1.2.1.11.17.0		
<b><i>snmpInSetRequests</i></b> read-only	Counter	The total number of SNMP Set-Request PDUs that have been accepted and processed by the unit.
1.3.6.1.2.1.11.18.0		
<b><i>snmpInGetResponses</i></b> read-only	Counter	The total number of SNMP Get-Response PDUs that have been accepted and processed by the unit.
1.3.6.1.2.1.11.19.0		
<b><i>snmpInTraps</i></b> read-only	Counter	The total number of SNMP Trap PDUs that have been accepted and processed by the unit.
1.3.6.1.2.1.11.20.0		
<b><i>snmpOutTooBigs</i></b> read-only	Counter	The total number of SNMP PDUs that were generated by the unit and for which the value of the error-status field is <i>tooBig</i> .
1.3.6.1.2.1.11.21.0		
<b><i>snmpOutNoSuchNames</i></b> read-only	Counter	The total number of SNMP PDUs that were generated by the unit and for which the value of the error-status field is <i>noSuchName</i> .
1.3.6.1.2.1.11.22.0		
<b><i>snmpOutBadValues</i></b> read-only	Counter	The total number of SNMP PDUs that were generated by the unit and for which the value of the error-status field is <i>badValue</i> .
1.3.6.1.2.1.11.24.0		
<b><i>snmpOutGenErrs</i></b> read-only	Counter	The total number of SNMP PDUs that were generated by the unit and for which the value of the error-status field is <i>genErr</i> .
1.3.6.1.2.1.11.25.0		
<b><i>snmpOutGetRequests</i></b> read-only	Counter	The total number of SNMP Get-Request PDUs that have been generated by the unit.
1.3.6.1.2.1.11.26.0		
<b><i>snmpOutGetNxts</i></b> read-only	Counter	The total number of SNMP Get-Next PDUs that have been generated by the unit.
1.3.6.1.2.1.11.27.0		
<b><i>snmpOutSetRequests</i></b> read-only	Counter	The total number of SNMP Set-Request PDUs that have been generated by the unit.

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
1.3.6.1.2.1.11.28.0		
<b><i>snmpOutGetResponses</i></b> read-only	Counter	The total number of SNMP Get-Response PDUs that have been generated by the unit.
1.3.6.1.2.1.11.29.0		
<b><i>snmpOutTraps</i></b> read-only	Counter	The total number of SNMP Trap PDUs that have been generated by the unit.
1.3.6.1.2.1.11.30.0		
<b><i>snmpEnableAuthenTraps</i></b> read-write	INTEGER <i>enabled(1), disabled(2)</i>	Indicates whether or not the unit is permitted to generate authentication-failure traps.

# 7

# *Frame Relay MIB — RFC 1315*

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Request For Comments (RFC) 1315 is the industry standard MIB for Frame Relay circuits. This chapter includes the following sections:

- Frame Relay MIB road map
- A complete listing of the Frame Relay MIB. The only MIB variables supported by T1 Frame Monitoring DSUs are marked in the circuit table (see [page 208](#)).

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# The Frame Relay MIB road map

*SNMP MIBs are not always the easiest documents to navigate. This road map should enable you to more quickly find what you are looking for.*

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## MIB root down to *frame-relay*

*iso(1)*  
*org(3)*  
*dod(6)*  
*internet(1)*  
*mgmt(2)*  
*mib-2(1)*  
*transmission(10)*  
*frame-relay(32)*

## The data link connection management interface table

*frame-relay(32)*  
**frDlcmiTable(1)**  
  frDlcmiEntry(1)  
    frDlcmiIfIndex(1)  
    frDlcmiState(2)  
    frDlcmiAddress(3)  
    frDlcmiAddressLen(4)  
    frDlcmiPollingInterval(5)  
    frDlcmiFullEnquiryInterval(6)  
    frDlcmiErrorThreshold(7)  
    frDlcmiMonitoredEvents(8)  
    frDlcmiMaxSupportedVCs(9)  
    frDlcmiMulticast(10)

## The circuit table

**frCircuitTable(2)\***  
  frCircuitEntry(1)\*  
    frCircuitIfIndex(1)\*  
    frCircuitDlci(2)\*  
    frCircuitState(3)\*  
    frCircuitReceivedFECNs(4)\*  
    frCircuitReceivedBECNs(5)\*  
    frCircuitSentFrames(6)\*  
    frCircuitSentOctets(7)\*  
    frCircuitReceivedFrames(8)\*  
    frCircuitReceivedOctets(9)\*  
    frCircuitCreationTime(10)\*  
    frCircuitLastTimeChange(11)\*  
    frCircuitCommittedBurst(12)\*  
    frCircuitExcessBurst(13)\*

frCircuitThroughput(14)\*

\*Supported in T1 Frame Monitoring DSUs.

### The error table

```
frErrTable(3)
  frErrEntry(1)
    frErrIfIndex(1)
    frErrType(2)
    frErrData(3)
    frErrTime(4)
```

### Frame relay globals

```
frame-relay-globals(4)
  frTrapState(1)
```

## The data link connection management interface table

**Table 28**

OID, Name, Access	Syntax	Description
<i>transmission.32.1</i>		
<b>frDlcmiTable</b> not-accessible	SEQUENCE OF FrDlcmiEntry	The parameters for the Data Link Connection Management Interface for the frame relay service on this interface.
<i>transmission.32.1.1</i>		
<b>frDlcmiEntry</b> not-accessible	INDEX <i>frDlcmiIfIndex</i>	An entry in the Data Link Connection Management Interface table that consists of the following objects:  <i>frDlcmiIfIndex,</i> <i>frDlcmiState,</i> <i>frDlcmiAddress,</i> <i>frDlcmiAddressLen,</i> <i>frDlcmiPollingInterval,</i> <i>frDlcmiFullEnquiryInterval,</i> <i>frDlcmiErrorThreshold,</i> <i>frDlcmiMonitoredEvents,</i> <i>frDlcmiMaxSupportedVCs,</i> <i>frDlcmiMulticast</i>
<i>transmission.32.1.1.1.frDlcmiIfIndex</i>		
<b>frDlcmiIfIndex</b> read-only	Index	The <i>ifIndex</i> value of the corresponding <i>ifEntry</i> .
<i>transmission.32.1.1.2.frDlcmiIfIndex</i>		
<b>frDlcmiState</b> read-write	INTEGER <i>noLmiConfigured(1),</i> <i>lmiRev1(2),</i> <i>ansiT1-617-D(3),</i> <i>ansiT1-617-B(4)</i>	ANSI T1.617 Annex D ANSI T1.617 Annex B  This variable states which Data Link Connection Management scheme is active (and by implication, what DLCI it uses) on the Frame Relay interface.
<i>transmission.32.1.1.3.frDlcmiIfIndex</i>		
<b>frDlcmiAddress</b> read-write	INTEGER <i>q921(1),</i> <i>q922March90(2),</i> <i>q922November90(3),</i> <i>q922(4)</i>	13-bit DLCI 11-bit DLCI 10-bit DLCI Final standard  This variable states which address format is in use on the Frame Relay interface.
<i>transmission.32.1.1.4.frDlcmiIfIndex</i>		
<b>frDlcmiAddressLen</b> read-write	INTEGER <i>two-octets(2),</i> <i>three-octets(3),</i> <i>four-octets(4)</i>	This variable states which address length in octets. In the case of Q922 format, the length indicates the entire length of the address including the control portion.

**Table 28**

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
<i>transmission.32.1.1.5.frDlcmlfIndex</i>		
<b>frDlcmiPollingInterval</b> read-write	INTEGER (5..30)	This is the number of seconds between successive status enquiry messages.
<i>transmission.32.1.1.6.frDlcmlfIndex</i>		
<b>frDlcmiFullEnquiryInterval</b> read-write	INTEGER (1..255)	Number of status enquiry intervals that pass before issuance of a full status enquiry message.
<i>transmission.32.1.1.7.frDlcmlfIndex</i>		
<b>frDlcmiErrorThreshold</b> read-write	INTEGER (1..10)	This is the maximum number of unanswered Status Enquiries the equipment shall accept before declaring the interface down.
<i>transmission.32.1.1.8.frDlcmlfIndex</i>		
<b>frDlcmiMonitoredEvents</b> read-write	INTEGER (1..10)	This is the number of status polling intervals over which the error threshold is counted. For example, if within <i>MonitoredEvents</i> number of events the station receives <i>ErrorThreshold</i> number of errors, the interface is marked as down.
<i>transmission.32.1.1.9.frDlcmlfIndex</i>		
<b>frDlcmiMaxSupportedVCs</b> read-write	INTEGER	The maximum number of Virtual Circuits allowed for this interface. Usually dictated by the Frame Relay network. In response to a SET, if a value less than zero or higher than the agent's maximal capability is configured, the agent should respond <i>badValue</i> .
<i>transmission.32.1.1.10.frDlcmlfIndex</i>		
<b>frDlcmiMulticast</b> read-write	INTEGER <i>nonBroadcast(1), broadcast(2)</i>	This indicates whether the Frame Relay interface is using a multicast service.

## The circuit table

**Table 29**

OID, Name, Access	Syntax	Description
<i>transmission.32.2</i>		
<b>frCircuitTable</b> not-accessible	SEQUENCE OF FrCircuitEntry	A table containing information about specific Data Link Connection Identifiers and corresponding virtual circuits. Supported in T1 Frame Monitoring DSUs.
<i>transmission.32.2.1</i>		
<b>frCircuitEntry</b> not-accessible	INDEX <i>frCircuitIfIndex</i> , <i>frCircuitDlcI</i>	An entry in the Data Link Connection Identifiers table that consists of the following objects:  <i>frCircuitIfIndex</i> , <i>frCircuitDlcI</i> , <i>frCircuitState</i> , <i>frCircuitReceivedFECNs</i> , <i>frCircuitReceivedBECNs</i> , <i>frCircuitSentFrames</i> , <i>frCircuitSentOctets</i> , <i>frCircuitReceivedFrames</i> , <i>frCircuitReceivedOctets</i> , <i>frCircuitCreationTime</i> , <i>frCircuitLastTimeChange</i> , <i>frCircuitCommittedBurst</i> , <i>frCircuitExcessBurst</i> , <i>frCircuitThroughput</i> Supported in T1 Frame Monitoring DSUs.
<i>transmission.32.2.1.1,frCircuitIfIndex,frCircuitDlcI</i>		
<b>frCircuitIfIndex</b> read-only	Index	The <i>ifIndex</i> value of the <i>ifEntry</i> this virtual circuit is layered onto. Supported in T1 Frame Monitoring DSUs.
<i>transmission.32.2.1.2,frCircuitIfIndex,frCircuitDlcI</i>		
<b>frCircuitDlcI</b> read-only	DLCI	The Data Link Connection Identifier for this virtual circuit. Supported in T1 Frame Monitoring DSUs.
<i>transmission.32.2.1.3,frCircuitIfIndex,frCircuitDlcI</i>		
<b>frCircuitState</b> read-write	INTEGER <i>invalid(1)</i> , <i>active(2)</i> , <i>inactive(3)</i> DEFVAL active	Indicates whether the particular virtual circuit is operational. In the absence of a Data Link Connection Management Interface, virtual circuit entries (rows) may be created by setting virtual circuit state to “active”, or deleted by changing Circuit state to “invalid”. Whether or not the row actually disappears is left to the implementation, so this object may actually read as “invalid” for some arbitrary length of time. It is also legal to set the state of a virtual circuit to “inactive” to temporarily disable a given circuit. Supported in T1 Frame Monitoring DSUs.
<i>transmission.32.2.1.4,frCircuitIfIndex,frCircuitDlcI</i>		
<b>frCircuitReceivedFECNs</b> read-only	Counter	Number of frames received from the network indicating forward congestion since the virtual circuit was created. Supported in T1 Frame Monitoring DSUs.

**Table 29**

<b>OID, Name, Access</b>	<b>Syntax</b>	<b>Description</b>
<i>transmission.32.2.1.5.frCircuitIfIndex.frCircuitDlci</i>		
<b>frCircuitReceivedBECNs</b> read-only	Counter	Number of frames received from the network indicating backward congestion since the virtual circuit was created. Supported in T1 Frame Monitoring DSUs.
<i>transmission.32.2.1.6.frCircuitIfIndex.frCircuitDlci</i>		
<b>frCircuitSentFrames</b> read-only	Counter	The number of frames sent on this virtual circuit since it was created. Supported in T1 Frame Monitoring DSUs.
<i>transmission.32.2.1.7.frCircuitIfIndex.frCircuitDlci</i>		
<b>frCircuitSentOctets</b> read-only	Counter	The number of octets sent on this virtual circuit since it was created. Supported in T1 Frame Monitoring DSUs.
<i>transmission.32.2.1.8.frCircuitIfIndex.frCircuitDlci</i>		
<b>frCircuitReceivedFrames</b> read-only	Counter	Number of frames received over this virtual circuit since it was created. Supported in T1 Frame Monitoring DSUs.
<i>transmission.32.2.1.9.frCircuitIfIndex.frCircuitDlci</i>		
<b>frCircuitReceivedOctets</b> read-only	Counter	Number of octets received over this virtual circuit since it was created. Supported in T1 Frame Monitoring DSUs.
<i>transmission.32.2.1.10.frCircuitIfIndex.frCircuitDlci</i>		
<b>frCircuitCreationTime</b> read-only	TimeTicks	The value of <i>sysUpTime</i> when the virtual circuit was created, whether by the Data Link Connection Management Interface or by a SetRequest.
<i>transmission.32.2.1.11.frCircuitIfIndex.frCircuitDlci</i>		
<b>frCircuitLastTimeChange</b> read-only	TimeTicks	The value of <i>sysUpTime</i> when last there was a change in the virtual circuit state.
<i>transmission.32.2.1.12.frCircuitIfIndex.frCircuitDlci</i>		
<b>frCircuitCommittedBurst</b> read-write	INTEGER	This variable indicates the maximum amount of data, in bits, that the network agrees to transfer under normal conditions, during the measurement interval. Supported in T1 Frame Monitoring DSUs.
<i>transmission.32.2.1.13.frCircuitIfIndex.frCircuitDlci</i>		
<b>frCircuitExcessBurst</b> read-write	INTEGER	This variable indicates the maximum amount of uncommitted data bits that the network will attempt to deliver over the measurement interval. By default, if not configured when creating the entry, the Excess Information Burst Size is set to the value of <i>ifSpeed</i> . Supported in T1 Frame Monitoring DSUs.

**Table 29**

OID, Name, Access	Syntax	Description
<i>transmission.32.2.1.14.frCircuitIfIndex.frCircuitDlcI</i>		
<b>frCircuitThroughput</b> read-only	TimeTicks	<p>Throughput is the average number of “Frame Relay Information Field” bits transferred per second across a user network interface in one direction, measured over the measurement interval.</p> <p>If the configured committed burst rate and throughput are both non-zero, the measurement interval <math>T=frCircuitCommittedBurst/frCircuitThroughput</math>.</p> <p>If the configured committed burst rate and throughput are both zero, the measurement interval <math>T=frCircuitExcessBurst/ifSpeed</math>.</p> <p>Supported in T1 Frame Monitoring DSUs.</p>

## The error table

**Table 30**

OID, Name, Access	Syntax	Description
<i>transmission.32.3</i>		
<b>frErrTable</b> not-accessible	SEQUENCE OF FrErrEntry	A table containing information about errors on the Frame Relay interface.
<i>transmission.32.3.1</i>		
<b>frErrEntry</b> not-accessible	INDEX <i>frCircuitIfIndex</i>	An entry in the Frame Relay interface error table that consists of the following objects:  <i>frErrIfIndex</i> , <i>frErrType</i> , <i>frErrData</i> , <i>frErrTime</i>
<i>transmission.32.3.1.1.frErrIfIndex</i>		
<b>frErrIfIndex</b> read-only	Index	The <i>ifIndex</i> value of the corresponding <i>ifEntry</i> .
<i>transmission.32.3.1.2.frErrIfIndex</i>		
<b>frErrType</b> read-only	INTEGER <i>unknownError(1)</i> , <i>receiveShort(2)</i> , <i>receiveLong(3)</i> , <i>illegalDLCI(4)</i> , <i>unknownDLCI(5)</i> , <i>dlcmiProtoErr(6)</i> , <i>dlcmiUnknownIE(7)</i> , <i>dlcmiSequenceErr(8)</i> , <i>dlcmiUnknownRpt(9)</i> , <i>noErrorSinceReset(10)</i>	The type of error that was last seen on this interface.
<i>transmission.32.3.1.3..frErrIfIndex</i>		
<b>frErrData</b> read-only	OCTET STRING	An octet string containing as much of the error packet as possible. At a minimum, it must contain the Q.922 address or as much as was delivered. It is desirable to include all information up to the PDU.
<i>transmission.32.3.1.3.4.frErrIfIndex</i>		
<b>frErrTime</b> read-only	TimeTicks	The value of <i>sysUpTime</i> at which the error was detected.

## Frame Relay globals

Table 31

OID, Name, Access	Syntax	Description
<i>transmission.32.4.1.0</i>		
<b>frTrapState</b> read-write	INTEGER <i>enabled</i> (1), <i>disabled</i> (2) DEFVAL disabled	This variable indicates whether the system produces the frDLCIStatusChange trap.

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